A PROPOSED PLAN OF TEACHING FOR INTEGRATED LEARNING IN A SELECTED MEDICAL AND A SELECTED SURGICAL SITUATION.

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Thesis

A PROPOSED PLAN OF TEACHING FOR INTEGRATED LEARNING IN A SELECTED MEDICAL AND A SELECTED SURGICAL SITUATION

by

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In partial fulfillment of the requirements

for the degree of Master of Science

August, 1954

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CHAPTER I

INTRODUCTION

It is an accepted and sound philosophy that as the needs of society change, so must the preparation of those who are to meet the needs of society change. In the past the pendulum in general education has swung from the presentation of facts accompanied by rote memorization on the part of the student to the concept in which the interests and desires of the student were emphasized. Through a process of studied evaluation the pendulum has obtained a degree of equilibrium between these two concepts. Today, while the learning situations are selected for the student, the student identifies the problem areas within the situation, selects the facts from past experiences which are pertinent, and seeks through new experiences the additional facts necessary. Then, after analysis of the data, the student proposes the solution to the problem. The student, through such a process, learns to think, judge, and act in life situations rather than in situations which may not be realistic in the present sociological structure. Education becomes a truly active process.

The era of compartmentalization, where each area within a curriculum was isolated from the next except as the intelligent student saw the need for the meeting of the two, has been replaced by a general trend towards unification of allied areas. This unification may be obtained through the process of correlation with broad concepts as the means of implementation, or through the process of integration, where, after a brief period

CHAPTER I

INTRODUCTION

of introduction, the threads of knowledge and application are interwoven to produce a complete picture.

Those concerned with the education of nurses have indicated a deep awareness of the profession's responsibility to society as well as the evolutionary processes that must continue if this responsibility is to be met. As Chayer[1] states,

> Nursing education has tended to follow the traditional pattern of perpetuating a subject dominated curriculum on one hand and a nurse-practice curriculum on the other, the one running parallel to the other but not necessarily arranged in such a way as to facilitate the process of integration within the individual.

The curriculum of a nursing school has been composed of unique and specific blocks of foundation and clinical areas. In the clinical area of medical-surgical nursing there has been a strong tendency to make an even further subdivision. This separation has been made not only by the segregation of patients geographically, but has been carried into the classroom and into the content of clinical teaching. Thus, the student of nursing, while in a specific clinical situation, may have received a limited view of the major health problems the patient has.

The investigators believe that the learning experiences available in a clinical situation may have similar and common elements. The presence of these common elements of nursing in both the medical and surgical areas might serve as the basis for integrated teaching in the clinical situation. To determine their presence, there is a need to investigate the specific clinical situation used for student experience.

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[1]Mary Ella Chayer, Nursing in Modern Society, G. P. Putnam Sons, New York, 1947, p. 72.

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Statement of the Problem

A proposed plan of teaching for integrated learning in a selected medical and selected surgical situation.

Sub-Problems

1. What are the major health problems found in this situation?
2. Do these major health problems include all the major health problems revealed by national statistics?
3. What are the secondary health problems?
4. What are the common nursing activities found in the care of both medical and surgical patients?
5. What activities are more pertinent to the care of medical patients and what activities are more pertinent to the care of surgical patients?
6. On the basis of the above evidence, what suggestions for teaching in the clinical situation can be made which will promote integration of learning?

Purposes of the Study

1. To find what common and unique activities in relation to major health problems are present on a selected medical and a selected surgical unit at "X" Hospital.
2. To identify from these findings, the learning opportunities for students of nursing in this situation.
3. To consider how these findings might be used to propose a plan for teaching in this clinical situation.

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Purposes of the Study

1. To find what common and unique activities in relation to major health problems are present on a selected medical and a selected surgical unit at "C" Hospital.
2. To identify from these findings, the learning opportunities for students of nursing in this situation.
3. To consider how these findings might be used to propose a plan for teaching in this clinical situation.

Scope

1. The study included all patients hospitalized on a selected medical unit and a selected surgical unit in "X" Hospital from February 19, 1954 to April 16, 1954.
2. The following data were collected: age, primary and secondary diagnoses, nursing procedures, medications, special treatments, and laboratory and X-ray tests, specific observations required of the nurse, emergency measures as required, physical handicaps of patients, and health teaching--nature and extent.
3. The number of patients included in the study was as follows:

Male medical	--	52
Female medical	--	61
Male surgical	--	60
Female surgical	--	108

4. The total number of nursing days included was 3,298.
5. No attempt was made to determine where experiences lacking in the medical area and surgical area might be found.
6. The proposed teaching plan is based primarily on these findings.

Limitations

The primary limitation to the study was in the method used because information was obtained only from records, supplemented by analysis by the investigators. There was no observation in the clinical situation. The kinds of patients and relationships found in another situation might not be the same as found here because of concurrent medical research and the types of patients needed for the education of medical students.

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While the length of time may seem to be a limiting factor, it is not believed to be so in this study because a previous study,[2] which sampled all seasons, showed very little variations due to this factor.

Method

The length of time allotted to the collection of the data was eight weeks on each ward. The data were collected from February 19, 1954 to April 16, 1954. The selection of dates was purely arbitrary as a previous study[3] in the same situation included samplings from three different seasons and showed only very slight variations in the types of medical and surgical patients hospitalized during the different seasons. Data were collected on all patients hospitalized during this period on a selected medical and a selected surgical unit. Both units are used for student experiences for collegiate basic students of nursing and students of nursing in a hospital school. The medical unit has a capacity for 34 patients; the surgical unit has a capacity for 47 patients. The surgical unit has patients representing all branches of surgical specialization. After examination of the form used by Sheffield,[4] an instrument was devised in terms of the material desired by the investigators. Certain information was only for use of the investigators to prevent errors

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[2]Winifred Griffin et al, "A Study of Learning Experiences Available for Students of Nursing Based on Data Obtained from Records of Patients on Two Selected Units at the Massachusetts Memorial Hospitals Representing Three Different Periods in the Year 1952," Unpublished study, Boston University School of Nursing, 1954, Form A, Appendix.

[3]Ibid.

[4]Gertrude Jordan Sheffield, "A Plan for Self Study of the Adequacy of the Clinical Resources in a Basic Nursing Curriculum," Unpublished Master's thesis, Boston University School of Nursing, 1951, Form A, Appendix.

and confusion while the data were being collected; namely, the patients' names, record and unit numbers.

In order to develop a teaching plan around the nursing activities which were available in this situation, the data were then analyzed in terms of nursing activities common to both areas, and the medical syndromes found in each area.

Presentation

Chapter II includes the philosophy; Chapter III, the presentation and analysis of data; Chapter IV, the proposed plan for teaching in the clinical situation; and Chapter V, the summary, conclusions, and recommendations.

CHAPTER II

PHILOSOPHY

Nursing, though still in a transitional period of professional growth, has a major responsibility in providing the quantity and quality of nursing care to meet the needs of society. The source of direction, then, shall lie in the society in which we live and in which the student of nursing shall ultimately practice.

Many conflicts have arisen over the question, is nursing actually meeting the needs of society? Bridgeman[1] states that, "Probably no other profession is undergoing so dynamic a reconsideration of itself and its social role as nursing." In view of this, it is recognized that experimentation must be carried out in the education of nurses to determine the most effective method of arriving at a solution.

In stating that a primary goal is in meeting the needs of society, recognition must be made also of the individual who will be serving these needs. In educational programs of nursing one of the focal points then must be the student of that program, for she will be the one experiencing the educational process. Tyler[2] defines an educational process as ". . . . changing the behavior of students in desired directions. The term 'behavior' is used in the broad sense and includes thinking, feeling, and acting."

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[1]Margaret Bridgeman, Collegiate Education for Nursing, Russell Sage Foundation, New York, 1953, p. 7.

[2]Ralph Tyler, "Evolving a Functional Curriculum," The American Journal of Nursing (December, 1951), 51: 736.

Not only must the program be designed to help the student achieve competency in nursing activities, but it should guide her in acquiring a degree of insight into her own self-realization, so that, by her personal growth, appreciations of ethical values, and the development of socialized interests, she can contribute through her life activity to the society in which she lives.

The function of any educational scheme is to stimulate learning which, in turn, must have specific value and meaning to the learner. Productive learning is the process of participating in and understanding socially valuable experiences.[3] Each experience contributes in one way or another to the development of the individual. Jensen[4] points out that, "True learning prepares the student to meet new situations. Her education is a continuous process, or growth. Skills and technics are necessary in the modern concept of education, but they become means, not ends in themselves."

The educational programs in many schools of nursing have too often tended to give theoretical instruction without having a plan for directing its application and making the student aware of its relation to the total care of the patients. In reference to such inadequate utilization of valuable learning experiences Chayer[5] states, "Nursing education has tended to follow the traditional pattern of perpetuating a subject dominated

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[3]Deborah MacLurg Jensen, Clinical Instruction and Its Integration in the Curriculum, 3rd edition, C. V. Mosby Company, St. Louis, 1952, p. 133.

[4]Ibid., p. 33.

[5]Chayer, op. cit., p. 72.

dominated curriculum on one hand a nurse-practice curriculum on the other, the one running parallel to the other but not necessarily arranged in such a way as to facilitate the process of integration within the individual."

The selection of learning experiences must be based on a consideration of logical and realistic principles that will best promote the desired learning. The student should be helped to achieve integration of all knowledges and skills, rather than presenting them as separate phases of learning. This way, then, can learning activities become a functional part of the student's personality and provide her with an ability to meet specific life situations.

One of the major areas of experience utilized for the education of students of nursing is that given over to the care of adult patients needing medical and surgical treatments for physical disorders. Since this clinical field serves as a broad base for the development in the students of understandings, skills and appreciations in terms of their growth towards their professional nursing goals, it is imperative that maximum use be made of the educational experiences available.

The entire teaching plan must be designed to meet a purposeful goal. Just as any institution of higher learning must function with broad objectives in view, so must the component parts of that institution be capable of realizing specific objectives as they relate to their specific goals. In the area of medical-surgical nursing consideration must be made of the level of student growth as well as the learning experiences that can be assured in the continuance of that growth. This fact was pointed out by Jensen,[6] "All objectives must be defined in terms of the actual conditions

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[6]Jensen, op. cit., p. 80.

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[6] Jensen, op. cit., p. 80.

at the time when the plan is being made. Thus, these objectives will be changed from time to time as progress is made and as the situation changes."

The determination of objectives, then, could be thought of as setting a course of action comparable to the tracing of a route on a map. As the educational plan progresses, a lucid picture is shown in terms of where one has been and where one is going. Without established objectives there would be doubt as to the progression of learning. Tyler[7] says of educational objectives, "Without objectives a program is based on traditional content and teaching methods which are handed down from year to year, or else fluctuates according to personal preferences and current fads."

To those who participate in the planning and guidance of the learning experiences of the students falls the responsibility of identifying and selecting the framework of experiential situations which lend themselves to the progression of learning in the students. Beyond this point, however, the students should participate in the selection of actual experiences and problem areas within the situation which will assist in their personal and professional growth. This cannot be done in a hypothetical manner. The students and instructor should select actual experiences in terms of the other experiences the students have had, experiences available, and the experiences necessary for the achievement of the objectives of the curriculum. Plans should be formulated upon a complete and accurate picture of the situation used for educational experience.

The omnipresent question that faces most instructors of nursing is that of determining what and how much should be taught students; and, by the same token, what and how much can the students be expected to retain

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[7]Tyler, op. cit., p. 736.

and utilize. As was pointed out by Bowen,[8] "We recognize that frontiers of knowledge are ever expanding, and that it is impossible to teach everything that is already known, to say nothing of what may be discovered tomorrow." Cohen,[9] in speaking of the problems of curriculum planning for the education of medical students, says, "We have all protested against the student's being called upon to assimilate a vast mass of unrelated facts which increase in number with the expansion of knowledge."

The curriculum plan for medical-surgical nursing cannot embrace all of the theory and detailed practices which are inherent in so wide a scope of therapy. It must be composed of a vital and significant foundation which will lend itself to the development and enhancement by each student in terms of his or her individual growth and needs. Such a plan must be flexible enough to facilitate readjustments that are required in view of constant changes exerted by social, economic, and scientific progress.

The multiplicity of health needs of people is further involved by the diverse ways in which there is response and reaction by patient, nurse and personnel to illness and its therapy. There are, however, major health needs that require the understanding and utilization of basic principles of nursing care. The education of the student of nursing then must be built upon this foundation core of learning which, by the very fact of its integrated wholeness, shall provide the solid base for increased knowledge and skill within all facets of professional nursing activities.

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[8]Eleanor Page Bowen, "Synthesis of the Biological Sciences," Fifty-Seventh Annual Report of the National League of Nursing Education, 1951, p. 272.

[9]Henry Cohen, "The Balanced Curriculum," The New England Journal of Medicine (November 26, 1953), 249: 72.

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CHAPTER III

ANALYSIS AND PRESENTATION OF DATA

To ascertain the types of nursing experiences and activities available for students of nursing in the medical-surgical area in order to propose a plan of clinical instruction for students of nursing, a study was made of the patients on a selected medical unit and a selected surgical unit for eight consecutive weeks. These units were selected mainly because both are used for medical and surgical nursing experience for collegiate students of nursing and students of nursing in a hospital school. After examination of Form A in Sheffield's[1] study and the form used by Griffin,[2] the instrument (Form A and B, Appendix) was devised in terms of the information desired by the investigators. The instrument provides space for the following information on a day by day basis: age, primary diagnosis, secondary diagnosis, total number of days hospitalized, nursing procedures, special treatments and laboratory tests, medications, physical handicaps, diet, complications, specific observations required of the nurse, emergency measures necessary, and health teaching--nature and extent indicated. A separate form was kept for each patient and additional forms were added as necessary.

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[1] Sheffield, op. cit., Form A, Appendix.

[2] Griffin et al, op. cit., Form A, Appendix.

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[1] Sheffield, op. cit., Form A, Appendix.

[2] Griffin et al, op. cit., Form A, Appendix.

The desired information was obtained from the patients' records, the doctors' order book, the kardex, the census record, and the log[3] sheets. These sources were readily available to the investigators; the only problem which presented itself was the follow-up of records of discharged patients if the investigators were not in the hospital at the time of the discharge of the patients. One hundred thirteen medical patients and 168 surgical patients were included in the study. The surgical patients include the following areas of surgical specialization: general surgery, gynecology, thoracic surgery, urology, orthopedics, ophthalmology, and neurology.

Major Health Problems and Age of Patients

The primary and secondary major health problems of the medical and surgical patients on the basis of the number of days available for experience for students of nursing are shown on Graph I, Appendix. A study of this graph indicates that cardio-vascular renal conditions, malignancies, diabetes mellitus and gastro-intestinal conditions excluding ulcers were common to both areas. Conditions which were found to be primarily medical in nature are pneumonia and other respiratory conditions, ulcers, cirrhosis of the liver, and arthritis. Conditions which were found to be primarily surgical in nature were gynecological conditions, metabolic conditions other than diabetes, tuberculosis (in this situation), renal and urological conditions excluding nephritis, biliary conditions excluding cirrhosis of the liver, hernia, and orthopedic conditions other than arthritis. Both

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[3]The log is the plan of care and treatment which is kept at the patient's bedside on the surgical unit in this situation. It consists of the doctor's orders, nurses' notes, a reminder sheet similar to the kardex sheet and the clinical sheet.

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The primary and secondary major health problems of the medical and surgical patients on the basis of the number of days available for experience for students of nursing are shown on Graph I, Appendix. A study of this graph indicates that cardio-vascular renal conditions, malignancies, diabetes mellitus and gastro-intestinal conditions excluding ulcers were common to both areas. Conditions which were found to be primarily medical in nature are pneumonia and other respiratory conditions, ulcers, cirrhosis of the liver, and arthritis. Conditions which were found to be primarily surgical in nature were gynecological conditions, metabolic conditions other than diabetes, tuberculosis (in this situation), renal and urological conditions excluding nephritis, biliary conditions excluding cirrhosis of the liver, hernia, and orthopedic conditions other than arthritis. Both

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[3]The log is the plan of care and treatment which is kept at the patient's bedside on the surgical unit in this situation. It consists of the doctor's orders, nurses' notes, a reminder sheet similar to the kardex sheet and the clinical sheet.

areas had several miscellaneous problems.

The percentage of nursing days for each health problem on the medical unit and surgical unit and percentage of nursing days for each health problem in the total study were computed and are shown on Graph II, Appendix. From this approach, health problems found to be common to both areas were cardio-vascular renal conditions, diabetes mellitus, respiratory conditions other than penumonia, malignancies, biliary conditions other than cirrhosis of the liver, other renal and urological conditions, arthritis and other orthopedic conditions. Those which appeared to be primarily surgical in nature were hernia and gynecological conditions. The major health problems found to be primarily medical in nature were pneumonia and cirrhosis of the liver. While an occasional secondary diagnosis of hernia appeared on the medical unit, gynecological conditions were confined to the surgical unit.

The major health problems found in the two units were then compared with national statistics of the ten leading causes of death. Table I indicates the comparison of national statistical findings with the incidence of health problems found on the medical and surgical units during the study. The major health problems of cardio-vascular renal conditions, malignancies fall into the same place in the total of the health problems found in the study as on the list based on national statistics: first, second, and sixth place. Ulcers and other gastro-intestinal conditions are in fourth place on the study but are in ninth place in the national findings. Gynecological conditions, arthritis and other orthopedic conditions, respiratory conditions excluding pneumonia, hernia, and biliary conditions excluding

TABLE I

COMPARISON OF MAJOR HEALTH PROBLEMS FOUND IN A MEDICAL UNIT AND IN A SURGICAL UNIT WITH NATIONAL STATISTICS

Medical Unit	Surgical Unit	Total	National Statistics
1.Cardio-vascular renal conditions	1.Cardio-vascular renal conditions	1.Cardio-vascular renal conditions	1.Cardio-vascular renal conditions
2.Ulcers and other gastro-intestinal conditions	2.Malignancies	2.Malignancies	2.Malignancies
3.Respiratory conditions other than pneumonia	3.Arthritis and other orthopedic conditions	3.Arthritis and other orthopedic conditions	3.Motor vehicle and other accidents
4.Diabetes mellitus	4.Gynecological conditions	4.Ulcers and other gastro-intestinal conditions	4.Influenza and pneumonia
5.Malignancies	5.Other renal and urological conditions	5.Other renal and urological conditions	5.Tuberculosis
6.Other renal and urological conditions	6.Ulcers and other gastro-intestinal conditions	6.Diabetes mellitus	6.Diabetes mellitus
7.Cirrhosis of the liver	7.Hernia	7.Respiratory conditions other than pneumonia	7.Senility and ill-defined conditions
8.Arthritis	8.Other biliary conditions	8.Gynecological conditions	8.Congenital malformations
9.Other biliary conditions	9.Diabetes mellitus	9.Biliary conditions other than cirrhosis of liver	9.Ulcers and other gastro-intestinal conditions
10.Pneumonia	10.Respiratory conditions other than pneumonia	10.Hernia	10.Cirrhosis of the liver
Others Hernia Other metabolic conditions Tuberculosis	Others Other metabolic conditions Cirrhosis of the liver Tuberculosis	Others Cirrhosis of the liver Other metabolic conditions Tuberculosis Pneumonia	

Source: Data collected from a selected medical unit and a selected surgical unit at "X" Hospital, February 19, 1954 to April 16, 1954.

TABLE I

COMPARISON OF MAJOR HEALTH PROBLEMS FOUND IN A MEDICAL UNIT AND IN A SURGICAL UNIT WITH NATIONAL STATISTICS

Medical Unit	Surgical Unit	Total	National Statistics
1. Cardio-vascular renal conditions	1. Cardio-vascular renal conditions	1. Cardio-vascular renal conditions	1. Cardio-vascular renal conditions
2. Ulcers and other gastro-intestinal conditions	2. Malignancies	2. Malignancies	2. Malignancies
3. Respiratory conditions other than pneumonia	3. Arthritis and other orthopedic conditions	3. Arthritis and other orthopedic conditions	3. Motor vehicle and other accidents
4. Diabetes mellitus	4. Gynecological conditions	4. Ulcers and other gastro-intestinal conditions	4. Influenza and pneumonia
5. Malignancies	5. Other renal and urological conditions	5. Other renal and urological conditions	5. Tuberculosis
6. Other renal and urological conditions	6. Ulcers and other gastro-intestinal conditions	6. Diabetes mellitus	6. Diabetes mellitus
7. Cirrhosis of the liver	7. Hernia	7. Respiratory conditions other than pneumonia	7. Senility and ill-defined conditions
8. Arthritis	8. Other biliary conditions	8. Gynecological conditions	8. Congenital malformations
9. Other biliary conditions	9. Diabetes mellitus	9. Biliary conditions other than cirrhosis of liver	9. Ulcers and other gastro-intestinal conditions
10. Pneumonia	10. Respiratory conditions other than pneumonia	10. Hernia	10. Cirrhosis of the liver
Others Hernia Other metabolic conditions Tuberculosis	Others Other metabolic conditions Cirrhosis of the liver Tuberculosis	Others Cirrhosis of the liver Other metabolic conditions Tuberculosis Pneumonia	

Source: Data collected from a selected medical unit and a selected surgical unit at "X" Hospital, February 1, 1954 to April 15, 1954.

cirrhosis of the liver appear in the list of the ten major health problems in this situation but are not found in the national figures. While motor vehicle and other accidents, influenza, pneumonia, tuberculosis, congenital malformations, and senility and ill-defined conditions do not appear as major health problems in this situation, experiences for students of nursing with patients presenting these problems may be found elsewhere in the curriculum. The high percentage of patients falling in age groups above 60 years of age indicates that, while senility was not noted as a primary or secondary diagnosis, its presence to a certain degree cannot be denied.

Next the essential elements to be considered when planning nursing care were isolated. These elements are: rehabilitation; family-patient teaching of care after discharge; socio-economics of patient's illness, progress, and rehabilitation; psychological aspects of patient, family, and condition; attitudes of patient and family toward life and illness; and referrals after discharge. Table II indicates the chronic or long-term illnesses classified according to the essential elements which must be considered in plans for care. With few exceptions, all of the factors apply to the illnesses listed.

The next factor taken into consideration was the age of the patients. In what period of life were the majority of the patients with whom the students would be concerned in this situation? The mean age for the total number of patients included in the study was 53 4/10 years; the mean age for the medical patients was 54 2/10 years; and the mean age for the surgical patient was 51 9/10 years. The average patient with whom the student of nursing would be concerned would be in his or her early 50's;

TABLE II

LONG TERM OR CHRONIC ILLNESSES CLASSIFIED ACCORDING TO THE ESSENTIAL ELEMENTS OF PATIENT CARE WHICH MUST BE CONSIDERED IN PLANS FOR CARE

Category of Long Term or Chronic Illness	Factors to be Considered in Planning Nursing Care					
	Rehabilitation	Family-Patient Teaching of Care after Discharge	Socio-Economics of Patient's Illness, Progress and Rehabilitation	Psychological Aspects of Patient, Family and Condition	Attitudes of Patient and Family toward Life and Illness	Referrals after Discharge
Cardio-vascular Renal Conditions	x	x	x	x	x	x
Malignancies	x	x	x	x	x	x
Diabetes	x	x	x	x	x	x
Ulcers	x	x	x	x	x	x
Arthritis and Other Orthopedic Conditions	x	x	x	x		x
Epilepsy	x	x	x	x	x	x
Tuberculosis	x	x	x	x	x	x
Asthma	x	x		x		x
Cirrhosis of Liver	x	x	x	x	x	x
Other Metabolic Conditions		x		x	x	x
Cataracts and Other Ophthalmological Conditions	x	x	x	x	x	x
Bronchiectasis		x	x		x	x
Syphilis	x	x	x	x	x	x
Anxiety States	x	x	x	x	x	x
Gynecological Conditions		x		x	x	x

Source: Data collected on a selected medical unit and a selected surgical unit in "X" Hospital.

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Cardio-vascular Renal Conditions	x	x	x	x	x	x
Malignancies	x	x	x	x	x	x
Diabetes	x	x	x	x	x	x
Ulcers	x	x	x	x	x	x
Arthritis and Other Orthopedic Conditions	x	x	x	x		x
Epilepsy	x	x	x	x	x	x
Tuberculosis	x	x	x	x	x	x
Asthma	x	x		x		x
Cirrhosis of Liver	x	x	x	x	x	x
Other Metabolic Conditions		x		x	x	x
Cataracts and Other Ophthalmological Conditions	x	x	x	x	x	x
Bronchiectasis		x	x		x	x
Syphilis	x	x	x	x	x	x
Anxiety States	x	x	*	x	x	x
Gynecological Conditions		x		x	x	x

Source: Data collected on a selected medical unit and a selected surgical unit in "X" Hospital.

an age at which a chronic disease might mean a marked lessening in income and activity which would have a definite bearing on the knowledge needed by the nurse to assist the patient to plan for and carry out his rehabilitation. The highest percentage of patients in any one age group was 21.7 percent for the ages between 60 and 69 years of age. The other age groups in order of number of patients included were: 50 to 59, 40 to 49, 20 to 29, 30 to 39, 70 to 79, 10 to 19, and 90 to 99 years of age. The percent of patients 60 years of age or older was 40.2. Graph III, Appendix, illustrates the number of patients, medical and surgical, in each age group.

Nursing Procedures

The nursing procedures available for student experience on the selected units were classified under selected categories (Table III, Appendix). This table indicates that most nursing procedures are common to both medical and surgical nursing. Those which occurred as activities only on the surgical unit were gastrostomy tube feedings, getting patient up in wheel chair, hot packs; procedures concerned with the drainage and irrigation of the stomach, chest cavity, biliary tract and suctioning of the trachea; use of ace bandages and binders, and preparation of the skin for surgery. The procedures which were available more frequently on the surgical unit than on the medical unit were: ambulating patients, dangling patients, special positioning of the patient, exercising of extremities, taking blood pressures, sitz baths, local applications of heat and cold; procedures concerned with drainage and irrigation of the colon and urinary bladder.

Nursing procedures occurring only on the medical unit were: skin care for incontinence, eye care, feeding patients, assisting patient with use of commode; stool, needle and syringe, bed pan, dish and linen precautions; rectal temperatures; administration of oxygen via nebulizer; and diabetic foot care. Those which were available more frequently on the medical unit than the surgical unit were: special back care, special mouth care, complete bed rest, bed rest with bathroom privileges, turning patients at varying given times; use of walker, cradle bed, tuberculosis precaution; administration of oxygen by tent; and postural drainage. Those activities concerned with personal hygiene, safety and comfort of the patient were prevalent in both areas.

Diets

The varieties of diets, regular and therapeutic, according to the number of patient days available are listed on Table IV, Appendix. Therapeutic diets appear to be a part of the plan of therapy more frequently on the medical unit than on the surgical unit. The number of different diets or varieties of diets emphasizes a need for the student to know the role the diet plays in the therapeutic plan of care, the principles underlying the diets most commonly used, and sources which may be utilized when called upon to teach the patient and family about therapeutic diets to be continued after discharge.

Medications

Experience in the administration of medications was readily available for students of nursing on both units (Table V, Appendix). Narcotics,

other analgesics, vitamins, sulfonamide compounds, antibiotic substances, and ophthalmic preparations were more frequently administered on the surgical unit. Respiratory stimulants, expectorants; drugs stimulating sympathetic nerve endings; drugs concerned with acid-base, water and mineral balance, cardiac stimulants, cardiac depressants, vasodilators, hematinics, preparations of endocrine origin, antacids, and counterirritants were more frequently administered on the medical unit. Experience was available in the following methods of administration: oral, subcutaneous, intramuscular, and rectal. Beyond the experience in administration of medications, however, the student needs knowledge and understanding of the role of medications in the plan of therapy and the therapeutic effectiveness of the drug so that this area of patient care does not become a routine of measuring and handing out medications.

Laboratory Tests, X-Rays and Special Treatments

The data concerning laboratory tests, X-rays and special treatments were obtained from the patients' records and lists of special tests entered on the census sheets by the head nurses. These procedures were categorized in terms of those which were diagnostic in nature and those which were therapeutic in nature as shown on Table VI, Appendix. Diagnostic procedures were fairly evenly distributed between the two units; the larger number found in some instances on the surgical unit may be due to the larger number of patients on this unit. Therapeutic procedures which appear to be predominately surgical in nature are the use of orthopedic equipment and nitrogen mustard therapy. The higher incidence of the use of orthopedic equipment on the surgical unit was due to the fact that, with the exception

other analgesics, vitamins, sulfonamide compounds, antibiotic substances, and ophthalmic preparations were more frequently administered on the surgical unit. Respiratory stimulants, expectorants; drugs stimulating sympathetic nerve endings; drugs concerned with acid-base, water and mineral balance, cardiac stimulants, cardiac depressants, vasodilators, hematinics, preparations of endocrine origin, antacids, and counterirritants were more frequently administered on the medical unit. Experience was available in the following methods of administration: oral, subcutaneous, intramuscular, and rectal. Beyond the experience in administration of medications, however, the student needs knowledge and understanding of the role of medications in the plan of therapy and the therapeutic effectiveness of the drug so that this area of patient care does not become a routine of measuring and handing out medications.

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of patients with arthritis, patients with orthopedic conditions were cared for primarily on the surgical unit.

Specific Observations Required of the Nurse

Orders written by the doctor for specific observations by the nurse were mainly for observation of specific signs and symptoms, nature of specimens, and patients' fluid intake and output (Table VI, Appendix). No observations were noted concerning the patients' psychological state, acceptance or rejection of aspects of his care, interaction between the patient and his family, and the patient and various members of the health team. The latter observations are also a part of nursing care which have importance in planning care for the patient in and out of the hospital.

Emergency Situations

During the eight weeks data were collected few emergency situations arose. Occurrences which were emergency in nature on the surgical unit consisted of the following: two medication reactions, one transfusion reaction, one incidence of surgical shock, one incidence of postoperative bleeding, one incidence of excessive expectoration of blood, one patient falling out of bed, and one tracheotomy. Those on the medical unit consisted of four patients becoming disoriented, two transfusion reactions; and one each of the following: grand mal seizure followed by the administration of artificial respiration; chill, and rectal bleeding. The most unusual emergency on the medical unit was the spontaneous rupturing of membrances by a prennant patient who was receiving care for infectious hepatitis. The emergencies were such as to require observation and

communication of observations by the nurse to those responsible for the direction of care of the patients and adjustments in nursing care.

Health Teaching

A scanning of Table VII, Appendix, would seem to indicate that health teaching for patients and families was not a usual occurrence in this situation. However, the findings shown in the table were taken from the doctors' order sheets and the nurses' notes if recorded there. It is not assumed that this is all the health teaching that was done in this situation as the investigators did not observe the teaching done by the nursing personnel as they cared for their patients. It may be assumed that health teaching was done in accordance with the needs of the individual patient and family with respect to those areas significant to the specific health problem. No plans for teaching nor the patients' acceptance of or progress in such plans were noted.

Physical Handicaps

The physical handicaps noted were those of physical deformity and not those resulting from disease processes as dyspnea due to congestive failure. The physical handicaps which the patients had on admission were: one incidence each of blindness and deafness and two incidences of amputations. The handicaps were such as might require adjustments in plans of nursing care and interpretation of care to the patients concerned.

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Summary

In view of the findings it would seem feasible to develop a clinical teaching program in medical-surgical nursing with stress upon the headings suggested in Table III, Appendix. As medications, nursing procedures, therapeutic diets, and diagnostic measures were found to be major areas, guides will be developed which will make these areas more meaningful to the student of nursing in terms of their meaning in the plan of therapy and the nurses' responsibilities in these areas. Emphasis will also be placed upon development of judgment and self discipline in the student and co-operative working relations within the unit in terms of the hospital objectives and the objectives of patient care.

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CHAPTER IV

IMPLICATIONS OF THE FINDINGS

An analysis of the data presented in Chapter III indicated that experience was available for students of nursing in the care of patients with similar major health problems on both the medical and the surgical unit. These health problems were cardio-vascular renal conditions, diabetes mellitus, respiratory conditions other than pneumonia, malignancies, biliary conditions other than cirrhosis of the liver, other renal and urological conditions, arthritis, and other orthopedic conditions. Certain problems such as gynecological conditions and hernia were unique to the surgical unit; and pneumonia and cirrhosis of the liver were unique to the medical unit. While the plans of care for the patients on these units are not identical, there are similarities in many instances.

Through cooperative planning by those involved in the educational program and the use of a controlled assignment, similar learning experiences may be selected for students on these units. By this same method, the unique experiences may be identified and plans made for the students to have experience in these areas. The selection of experiences should be made in terms of the level of professional growth of the student, the experiences available, the students' previous experiences, and concurrent classroom instruction.

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In view of the fact that there were different types of involvements within the major health problem areas (example: in the cardio-vascular

renal group there were patients with hypertension, arteriosclerosis, heart disease, rheumatic heart disease, thrombophlebitis, and congestive failure), as well as different degrees of involvement, the students may have experience in caring for patients who have various manifestations of the health problems. The students will have an opportunity to apply previously learned scientific and technical knowledges to the care of these patients and to identify and gain an understanding of the principles underlying the variations in plans of care. While all students may not have experience with all of the various manifestations during the same period, through a socialized method of instruction, the students may relate experiences and exchange information, and thus foster integrated learning through vicarious experiences.

As this is the first clinical experience for the students after the Introduction to Nursing, some type of experience record should be kept by either the student or clinical instructor so that as the student progresses her experiences proceed from the simple to the complex in a meaningful way. In such a progression of learning the students' activities at first should be those presenting basic or simple problems. The complexity of the problem areas in the students' experiences would be increased to the degree the student would be able to handle these problems. In this way, with guidance, the student will develop the ability to identify problems; analyze previous and concurrent knowledge and understandings for pertinent information; seek additional data necessary for solution of the problem; and finally evaluate the effectiveness of the plan.

The early problems for the student may be the development of nursing

care plans for patients to whom they are giving care, and the interpretation and ministration of care to the patients in terms of physical and mental comfort. Teaching may be planned to include the factors considered in developing nursing care plans and in evaluating such plans; problems met by students in implementing plans of care and observations that may be made while caring for patients. Later problems may be the development of plans of care for patients after discharge from the hospital.

The age range of patients included in the study was from 10 to 90 years of age; however, the majority of the patients were 40 years of age or over. While the role of the patient in the family (i.e., mother, wage earner, etc.) was not identified in the study, it may be assumed that there were representatives of these and other roles. This area represents learning opportunities for students in terms of the effects illness may have upon the patient because of his or her family role and upon the family as a whole. While the student may obtain some of this information from the patient's record and members of allied disciplines, she should be guided to identify the clues revealed in conversation with the patient and family and from her observations of the interaction between the patient and family which have meaning in the particular situation. The students should be given the opportunity to interpret this information to members of allied disciplines who may be of assistance to the patient and to analyze this information in terms of its meaning in her plan of care for the patient.

Early in the experience role playing might be used as a device to assist the student to identify some of the ways in which patients may

express their anxieties and fears. As the students progress, individual or group conferences might be held in which the students discuss the clues or information obtained in terms of their influence upon the plan of therapy for the patient. Technics of interviewing and the importance of listening to the patient may be highlighted here.

Another factor to be considered is the influence of age upon the patient's health problem. The student will see instances where age is an important factor in the progress and prognosis of various conditions. She will also see the effects, both physiological and psychological, of the aging process. Case presentation of patients in different age groups with the same major health problem might be used here to compare problems related to the aging factor.

During the investigation 363 diagnostic procedures were ordered for patients on the medical unit and 227 for patients on the surgical unit. The facts indicate that diagnostic procedures occur frequently enough to be of vital consideration in the total plan of therapy for most hospitalized patients. Some of these procedures require active participation and skill on the part of the nurse. For others, the nurse is responsible for the preparation and after care of the patient. The student should be aware of her responsibilities for interpreting the activity to the patient, recognizing and relieving the patients' anxieties about new experiences, as well as for actual participation in the experience.

The students should not only have an opportunity to care for patients who are having diagnostic procedures done but should be guided to apply knowledges and skills previously gained so that this experience becomes a

building block in the progression of learning. Teaching in this area should emphasize these activities as steps in the development of plans of care rather than as isolated entities. Each specific procedure, whether it is diagnostic or therapeutic in nature, will have more meaning for the students if they have an opportunity to see what is involved in the total activity. Early in the experience the students might observe some of the more commonly used procedures from the preparation of the patient through after care to develop an understanding of what the patient experiences. A conference may follow this observation to discuss the purposes of the procedure, responsibilities of personnel involved, and its value in plans of therapy for patients with specific health problems.

A patient clinic may also be utilized with several patients expressing the feelings they experienced towards some of the various diagnostic measures. From time to time members of the medical staff may interpret the findings as they apply to the patients to whom students are giving care. Students may also discuss fears patients have about these tests and the ways in which they alleviated some of these fears.

The analysis of data pertaining to medications indicated that many categories of drugs were used in the therapeutic plans for patients both on the medical and the surgical units. The antibiotic, chemotherapeutic, and narcotic drugs were more frequently used on the surgical unit. Cardiac stimulants, expectorants, and preparations of biological origin were used more frequently on the medical unit. While the student usually enters this experience with the principles underlying the various methods of administration of medications and computations of dosage, the student is

gaining knowledge of the drugs themselves concurrent with the experience.

Early in the experience, when the student is being supervised in the administration of medications to selected patients, the drugs chosen for administration might be those with which the student is familiar. After this initial period of supervision, the student should have access to reference materials in order to become familiar with the purposes, and desired and untoward effects of drugs which may be unfamiliar to her. When new or experimental drugs are used, the student should be encouraged to seek information about the drug from the pharmacist or research person and place the information on file so that others may have access to this information.

From the beginning of the experience, the student should observe the effects of the drug and its interaction with other phases of the therapeutic plan for the patient. When students are caring for patients who have similar health problems and are receiving the same or different medications, a group conference might be held in which the students discuss, from their observations, the therapeutic effectiveness of the drugs in each instance and the reasons for the effectiveness. Any untoward reactions with reasons for them should also be discussed.

As the student progresses in the experience, she may assume some of the responsibility for teaching patients the administration of medications to be continued at home. When the student is ready for this, she should have access to sources from which she may obtain information as to where the patient will obtain the medication, its cost, and the information that is to be imparted to the patient and family regarding the nature of

the drug, desired and untoward effects, action to be taken if the latter occur and method of administration. After the student has secured this information, the clinical instructor should guide the student in the use of interviewing to determine the patient's and family's understanding and knowledge of the drug and its administration; in planning the teaching and approach to the patient and family; and in evaluating the teaching.

While the data revealed certain specific nursing activities as the use of drainage and suctioning, the preparation of skin for surgery, and care of surgical dressings were specific to the surgical unit, most of the nursing procedures were common to both units. The most frequently performed were those concerned with the personal hygiene, safety, posture, rest and comfort of the patient. One reason that might account for this is that many of the major health problems found were of a long term or chronic nature and these activities are essential in the care of these patients. Some procedures, as the administration of oxygen, did not occur frequently.

When the students begin this experience, they are usually "procedure conscious"; their aim is the perfection of the technical skills involved in the execution of the procedures. At this time, through socialized methods, the clinical instructor may re-emphasize the principles of patient comfort and safety, economy of time and equipment, good workmanship, and therapeutic effectiveness, with the students sharing their experiences in adapting procedures to meet the needs of individual patients. Gradually emphasis may be placed upon the role of the nursing activities in the overall plan of care for the patient; the importance of careful observation of

therapeutic effectiveness and interpretation of these observations to the physician and other nursing personnel by written or oral reports.

Records should be kept to insure that the students get experiences that are meaningful to them and necessary in their basic professional preparation and not a mere repetition of experiences which may become routine. Learning situations that occur rarely may be used as the basis of nursing clinics so that as many students as possible share the experience. These clinics should be structured so as to emphasize the value of this specific experience in the therapeutic plan for the patient rather than the technics involved.

On the surgical unit the preparation of the skin for surgery, drainage and suctioning, and the care of surgical dressings will be procedures with which the students will have an opportunity to participate in. With the use of role playing the psychological implications to the patient who is anticipating having a surgical procedure done may be discussed. In a similar manner the patients' reactions to this experience, the possible reasons for the reactions, and the importance of interpreting these reactions may be identified. When caring for patients with conditions that require drainage and suctioning as an aspect of care, the scientific principles underlying their use may be reinforced and the nurse's responsibility for observing the nature of the drainage and maintaining the equipment in good working order may be emphasized.

Sixty-eight different diets or varieties of diets were found in these situations. While many of these diets occurred on the medical unit, the therapeutic diet was also used on the surgical unit. Early teaching in

the clinical situation in this area might be based on the ways in which the therapeutic diets patients are receiving differ from the regular diet with the students developing the principle involved if they are having diet therapy concurrent with this experience. The patients' cultural patterns of diet may be discussed in terms of the ways in which the therapeutic diets may differ from these patterns and the influence the differences may have on the patient's acceptance or rejection of the diet. Patients to whom the students are giving care might be selected as subjects for the discussion. The experiences selected for the students should include patients whose plans of care include different therapeutic diets.

Teaching may be based upon the value of the diet as related to other aspects of the plan of care for the patient, the importance of the patient's acceptance or rejection of the diet to allied professional personnel concerned with the direction of care for the patient. A student project that might be used here is the adaptation of a patient's cultural diet patterns to the prescribed therapeutic diet. This may also be used as an area in patient teaching. The factors involved in such a project may be discussed with the students in a group or individually. These factors might be: (1) the therapeutic diet involved, (2) the patient's cultural pattern, (3) the patient's and family's knowledge and understandings of the diet, (4) sources which may be used to assist the student to obtain additional information, (5) visual aids and methods that may be used, (6) development of the plan, (7) approach to patient and family, and (8) evaluation of the plan. The student should be free to select the patient for whom she wishes to develop the plans and the clinical instructor should be available for

student guidance when the student feels she needs such guidance.

While no data collected in the study revealed the socio-economic aspects of patient care, these factors should not be neglected in teaching in the clinical situation. Some information of this nature for individual patients may be obtained from the patient's record as occupation, or assistance from a cooperating agency. Many factors are involved: the effects of illness upon the financial resources of the patient and family, the effects of the illness upon the patient's return to work, and the reaction and attitude of the patient and family toward the illness.

The student may obtain some of this information from the social worker and physician; however, she may gain more from the patient and family if able to glean meaningful clues from conversations with them, especially if she has beginning skills in the use of the interview. The students should recognize that, while some patients may have similar problems in this area, all do not have the same problems. Through discussion with the students, the significance of these clues in planning for the patient and the importance of interpreting them to allied professional personnel may be stressed. Teaching may be broadened to include a working knowledge of those agencies outside of the hospital which participate in these aspects of patient care on local and national community level.

The technics that the nurse may use in altering the attitudes of patient and family towards illness should be included in teaching in the clinical situation. Case presentations may be used to illustrate the effects of both positive and negative attitudes upon the recovery of the patient and acceptance of plans for care after discharge. Also incidents

may be cited that illustrate ways in which the nurse may function in the community to foster positive attitudes towards major health problems. Indication of the patient's attitudes may be obtained from conversations, the patient's acceptance or rejection of plan of care, and the types of questions asked by the patient. The students may discuss these clues with the physician, social worker, staff nurse, and hospital chaplain, and plan ways to change the patient's attitude if negative. From such interaction with para-discipline personnel, the student will begin to realize her role as a member of this group and which members of the group may be most helpful with specific problems of the patient.

The instances of health teaching noted in the analysis of data were obtained from doctors' order sheets and nurses' notes if recorded there. No observations were made of the actual teaching done by nursing personnel. No plans for teaching nor indications of the patient's or family's progress or participation in the teaching were noted. It is not assumed that the incidences recorded were the only health teaching done.

It is not expected that the student will be able to teach the patient and family all of the aspects of care at the start of her experience. From the beginning of the students' experience, the instructional plan in the area of health teaching in the clinical situation might highlight the teaching the nurse may do while giving care to the patient in broad areas as personal hygiene. The students may then gradually assume responsibility, under the guidance of the clinical instructor, for the teaching of aspects of care to be continued at home. At this time the students may participate in interdisciplinary conferences where the scope

of the teaching to be done is defined, the responsibilities of each member of the group delimited, and a tentative plan may be proposed.

In a conference with the clinical instructor the student may evaluate the patient's and family's knowledge and understandings of the material to be included in the plan, interview the patient and family to confirm these understandings, and determine which member of the family will be responsible for the patient's care. The student then may develop her plan including the factual and technical aspects to be covered: community agencies that will participate in care of the patient after discharge; source materials that she will use and that she will give to the patient and family; visual aids and other teaching devices to be used; approach to patient and family; the socio-economic factors to be considered when equipment is to be obtained for home use; and the evaluation of teaching. This plan may then be discussed with others participating in the teaching of the patient to avoid conflicts and overlapping of information. The plan should include as much participation on the part of the patient and family as possible. The clinical instructor should be available for conferences as the student needs her. Arrangements might be made for the student to discuss the plans of care with a representative from the agency to whom the patient will be referred after discharge. The student should be free to select the patients with whom she will work and should develop plans for patients with both long term and short term health problems. Some method of guide sheets should be developed so that other members of the health team may see what has been taught and what is yet to come.

While no observations of diversional activities for patients were

made during the study. some teaching in the clinical situation should evolve around this phase of patient care. It might include the diversional activities in which some of the patients participate, the values of these activities in plan of care for patients with long term or chronic illnesses, and assisting patients who would like some activity. The reasons why some patients prefer no activities beyond those included in their plan of care, or why activities may be limited because of restrictions placed on the physical activities by the physician, should be included. If there are patients on the unit who desire some activity, or for whom some activity seems essential, a student project may be developed which would include the activities of the students in assisting the patients to obtain the necessary help.

Suggested Plan for Teaching in the Clinical Situation

The suggestions for teaching in these specific clinical situations may be used on either the medical or surgical unit. The teaching should be planned in terms of the similar and unique experiences available in the situation, concurrent classroom teaching, and the level of professional growth of the student.

A problem-solving approach to the learning experiences is suggested so that the student utilizes past knowledges and experiences to define the problem, seeks needed data through available sources, analyzes the information obtained to propose a solution, and evaluates the solution.

The suggestions included progress from the simple to the complex so that the student uses the knowledge she has when she enters the experience and gains further knowledge as she progresses. The suggestions

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also provide for the application of concurrent classroom learning to specific situations. Socialized methods of teaching are suggested to promote as much participation on the part of the student as possible. Interdisciplinary conferences are included so that the student will develop an understanding of the responsibilities of members of this group for the care of the patient. Emphasis should also be placed upon the student's role as a member of the nursing staff. It is recognized that each patient that the student of nursing cares for will not present problems related to all areas of the proposed plan: it is equally understandable that in some instances problems involved in the total care of the patient will not have been included in the plan.

The following plan which is presented in the form of thought-provoking questions, is suggested as a possible way in which the essential aspects of nursing care can be implemented in the clinical situation.

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The following plan which is presented in the form of thought-provoking questions, is suggested as a possible way in which the essential aspects of nursing care can be implemented in the clinical situation.

Plan for Nursing Care

I. Orientation

A. What are the objectives of the clinical experience in terms of student growth?

B. What kinds of patients are cared for in this unit?

C. What is the general standard of care in terms of the objectives of the hospital?

D. How does the physical plan of the unit differ from that of other units in which the students have had experience?

E. What is the plan of activities on the unit?

F. How are members of the health team and nursing team involved in the care of the patients?

II. What are some of the criteria for the selection of learning experiences for the student?

A. What is the level of student growth?

B. What are the objectives to be realized from this experience?

C. What is the concurrent formal classroom instruction?

D. Are similar learning experiences available for all students?

III. What are some of the factors to be considered in initiating a plan for nursing?

A. What are the patients' health problems?

B. What is the objective of the immediate plan of therapy for the patient and to what degree has this objective been met?

C. What is the objective of the total plan of therapy for the

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B. What is the objective of the immediate plan of therapy for the patient and to what degree has this objective been met?

C. What is the objective of the total plan of therapy for the

patient?

D. How may the student's ability to continue in the plan of therapy for the patient be evaluated?

IV. What are the factors involved in the actual ministration of nursing care to the patient?

A. How does the student establish rapport and interpret the plan of care to the patient?

B. How effectively does the student plan her activities?

C. What is the therapeutic effectiveness of the students' activities?

D. How does the student determine the response of the patient to the plan of care?

E. While giving care to the patient, how does the student detect clues indicative of the patient's attitude toward illness, hospitalization, socio-economic and psychological needs?

1. To whom does the student interpret this information?

2. What does this information mean to the student in terms of future planning for the patient?

F. How does the student evaluate this experience in terms of her growth and future needs?

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F. How does the student evaluate this experience in terms of her growth and future needs?

Nursing Procedures

I. What are the factors to be considered in identifying the technical skills and knowledge required to carry out the procedure?

A. Is this a procedure that has been carried out in a similar situation, and if so

1. Is there a need for adaptation of the procedure in terms of the needs of the individual patient?

2. Is the purpose of this procedure the same as those of procedures carried out previously?

3. What improvement in skills and understandings may be expected while performing the procedure?

B. If this procedure has not been within the realm of student experience,

1. What is the best method of preparing the student for the experience?

2. How can previous knowledges and skills be used in gaining competency in this procedure?

II. Therapeutic effectiveness of the procedure

A. What are the purposes of the procedure in the over-all plan of therapy?

1. Will the procedure effect symptomatic relief?

2. Does the procedure serve as a diagnostic procedure?

3. What is the degree to which the patient is involved in the procedure?

B. What are the ways in which the therapeutic effectiveness may be

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3. What is the degree to which the patient is involved in the procedure?

B. What are the ways in which the therapeutic effectiveness may be

measured or appraised, and what is the relationship with other phases of treatment?

III. What is the nurse's role in the performance of the procedure?

A. What degree of confidence does the student have of her own competency?

B. What are the nurse-patient relationships involved in

1. Explanation and orientation of the patient?

2. Gaining confidence and co-operation of the patient?

3. Personal consideration for the patient?

C. What are the significant observations regarding the procedure in terms of

1. Tolerance of the patient?

2. Desired or untoward effects?

3. Communication of results or effectiveness?

D. How may the procedure be evaluated in terms of

1. Degree to which desired effectiveness was achieved?

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Diagnostic Measures

I. How may understandings of the purposes and values of diagnostic procedures be developed?

A. Detections of deviations from normal physiology

B. Value in prevention of disease

C. Determination of course of therapy

D. Re-evaluation of patient's progress

II. What is the health team interaction with regard to these measures?

A. Doctor

B. Nurse

C. Personnel from X-ray department

D. Laboratory personnel

E. Research members

III. What is the nurses's responsibility in assisting with diagnostic procedures?

A. Does the nurse have an understanding of the therapeutic value?

B. Has the nurse developed skills necessary to participate in the procedure?

C. Does the nurse know and understand her responsibility to the patient in terms of

1. Moral and legal obligations?

2. Interpretation to the patient?

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D. What is the nurse's responsibility to the other members of the health team?

1. What is the value of proper preparation for effective performance of the procedure?
2. How can communications and interpersonal relations be improved?
3. What is the role of the nurse in this procedure in terms of total patient therapy?

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Medications

I. What are the values of medications as part of the total therapeutic plan for the patient?

   A. For what purposes are the medications being given?

   B. In what way may supportive measures increase the effectiveness of the medication?

II. What are the previous knowledges and skills of the students in this area?

   A. How may skills and knowledges acquired from previous experiences be evaluated?

   B. How may knowledge and skills be implemented and adapted to produce better understanding of the total therapeutic value to the patient?

   C. What are methods for evaluating the therapeutic effectiveness of the drug?

III. What are the responsibilities of the nurse in the administration of medications?

   A. What are the legal implications?

   B. How does she function as a co-operative member of the health team?

   C. What are her roles in the recognition of the psychological implications to the patient?

      1. Explanation and orientation to the patient

      2. Methods of reassuring patient in terms of

         a. Questions asked by the patient

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a. Questions asked by the patient

b. Anxieties expressed

c. Rejection of treatments

D. What are the economic factors of medications to be considered?

1. Initial cost of drug

2. Cost involved in short term therapy

3. Cost involved in long term therapy or continuous therapy

4. Sources of aid to meet additional financial burden

IV. What are the factors to be considered when planning health teaching for patient who will continue medicinal therapy after discharge from hospital?

A. What are the specific points of information to be given to the patient about the medication?

B. What instruction in methods of administration of the medication is necessary?

C. What adaptations are necessary for home use?

D. What safety factors must be considered?

E. What are the sources and cost of the medication?

F. How may this teaching be evaluated?

b. Anxieties expressed

c. Rejection of treatments

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F. How may this teaching be evaluated?

The Therapeutic Diet as a Factor in the Total Plan of Therapy

I. What are background knowledges and skills needed to understand the value of the therapeutic diet as a factor in the total plan of therapy for the patient?

A. What is the purpose of the diet as related to the disease process?

B. What are some of the various forms of the diet that might be used?

C. In what way does the therapeutic diet differ from the regular diet?

D. What is the relation of the diet to other therapeutic measures being carried out for the patient?

E. How may the therapeutic effectiveness of the diet be evaluated?

II. What is the health team interaction in this plan of therapy?

A. What are the responsibilities of each member of the group?

1. Interpreting the diet to the patient

2. Assisting the patient to plan for the continuation of his diet at home

3. Adjusting the diet in terms of the patient's normal food habits

III. What are the nurse's responsibilities?

A. The observation and communication of the patient's acceptance of the diet

B. Encouraging and assisting the patient to accept the diet

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III. What are the nurse's responsibilities?

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B. Encouraging and assisting the patient to accept the diet

IV. How may plans be made for the continuation of the diet in the home with the patient and his family?

A. What interpretation must be made to the patient and his family regarding the purpose and value of the diet?

B. How may the dietary habits of the patient be evaluated?

C. What adjustments of the patient's usual dietary habits be made?

D. What specific points of information must be taught regarding the diet?

E. In what manner can the effectiveness of the teaching be evaluated?

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Health Teaching for Patient and Family

I. How may the patient's health needs be evaluated?

A. What observations and interpretation must be made by the nurse regarding

1. The patient's knowledge and understanding of the health problem?

2. The objectives of the immediate and long-term therapy?

3. The psychological, socio-economic factors specific to the patient?

4. The role of the patient as a member of a family and community?

II. What are the factors involved in the development of a teaching plan?

A. What information will the patient and family need to know?

B. What is the responsibility of members of the family in continuing care of the patient after discharge?

C. What will determine the selection of equipment for use in the home?

1. Economic status

2. Adjustments necessary in home environment

D. What source materials may be given to the patient and family?

E. What community agencies could be utilized in the continuing of care of the patient?

III. How valuable was the experience to the student?

A. Did this experience serve to integrate previous experiences?

B. Was this an experience that contributed to the progression of

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C. Did this experience serve as a basis for further development of understanding and skills in health teaching?

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The Patient as a Member of a Family and the Community

I. What pertinent information have students gathered about their patients as members of a family and community?

A. How does the patient's occupation and role in the family influence the approach the nurse uses in helping the patient with his health problems?

B. Is the patient's participation in community activities significant in relation to his health needs?

C. How may the student learn more from the patient and his family?

1. Of what value is the art of listening?

2. How may the student develop this and use it in interviewing patients and families?

3. What are the significant points to be remembered for effective interviewing?

4. Of what significance are the clues the patient and family reveal pertaining to the socio-economic and psychological influences of the patient's illness for the family unit?

II. Of what value are the observations made of the interaction between the patient and family?

III. Of what significance is the patient's cultural background when interpreting plans of care to him?

IV. What information was sought by the patient and family significant to their problems?

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A. How does the patient's occupation and role in the family influence the approach the nurse uses in helping the patient with his health problems?

B. Is the patient's participation in community activities significant in relation to his health needs?

C. How may the student learn more from the patient and his family?

1. Of what value is the art of listening?

2. How may the student develop this and use it in interviewing patients and families?

3. What are the significant points to be remembered for effective interviewing?

4. Of what significance are the clues the patient and family reveal pertaining to the socio-economic and psychological influences of the patient's illness for the family unit?

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IV. What information was sought by the patient and family significant to their problems?

Diversional Activities

I. Of what significance are diversional activities for patients?

A. What do these activities mean to the students in terms of relaxation and self satisfaction?

B. What activities have the patients been observed doing in their spare time?

C. In what instances are such activities limited by health factors?

II. How may students determine the desires patients have for some activity?

III. How may students assist patients in securing directions, supplies, equipment necessary for such activities?

IV. Of what significance are diversional activities for

A. The patient with a short term illness?

B. The patient with a long term, chronic illness?

C. The patient with limited activities?

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CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

This study was done to propose a plan of teaching for integrated learning in a selected medical and selected surgical unit based upon the common and unique elements found in the situation that provide learning opportunities for the student of nursing.

An instrument was developed to collect data needed by the investigators to solve the problem. This information included the patients' diagnosis, age, nursing procedures, medications, diagnostic procedures and special treatments, diet, specific observations required of the nurse, emergency situations, and health teaching. This information was obtained from records as the patients' chart, kardex, census sheets, and logs. The method was a limitation in that records only were used and no observation of the activities on the selected units were included. The information was collected for a period of eight weeks. The time element was not a limitation because a previous study done in the same situation which sampled the different seasons of the year indicated very little seasonal variation.

The data were then analyzed and it was found that certain major health problems and many nursing procedures, medications, diagnostic procedures, and therapeutic diets were common to both units. Certain health problems, and a few nursing procedures, medications, and therapeutic diets were

specific to each unit. The findings related to health teaching were limited in that they were taken from records only and did not include observations of the teaching done by nursing personnel. No evidence was revealed pertinent to the socio-economic aspects of illness. The data pertaining to specific observations of the patients' acceptance or rejection of plans of care, attitude towards illness, interaction between patient and family and hospital personnel, and clues of the patients' anxieties and fears.

On the basis of these findings, suggestions were proposed for the teaching of these areas in these clinical situations in which the student may broaden her understandings of previous and concurrent knowledge through application in learning situations, develop skill in observation, interviewing and working with interdisciplinary groups, and see the relationships between the areas isolated in the study and the total therapeutic plans of patient care.

Conclusions

1. There is an opportunity for related learnings in both medical and surgical nursing.

2. It would be more economical to teach these common related elements as a unit within their proper relationships.

3. Few of the elements isolated in the study would lend themselves to isolated rather than integrated teaching because of their relationships with other aspects of patient care.

4. Certain of the major health problems isolated in the study require the effort of many agencies and representatives from allied medical fields.

Any plan to help the student develop in her professional role should include participation in interdisciplinary conferences.

5. Before planning teaching in a specific situation, the learning opportunities available should be assayed.

Recommendations

1. In view of the common elements in medical nursing and surgical nursing, these areas should probably be taught as one unit.

2. The proposed plan should be tried and evaluted in terms of effectiveness, practicability, and student achievement and professional and personal growth.

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APPENDIX

TABLE III

NUMBER OF DAYS NURSING PROCEDURES WERE AVAILABLE IN A MEDICAL UNIT AND IN A SURGICAL UNIT CLASSIFIED UNDER SELECTED CATEGORIES[a] FEBRUARY 19, 1954 TO APRIL 16, 1954

Nursing Procedures	Nursing Days Available	
	Medical Unit	Surgical Unit
Fundamentals of Nursing Care		
Personal Cleanliness		
Morning care	4	2
Afternoon care	69	
Special back care	133	87
Bath	164	425
Bath--assist with	7	21
Special mouth care	36	20
Eye care	3	
Skin care for incontinence	12	
Tub bath	4	4
Shampoo	2	3
Dietary Needs and Methods of Feedings		
Feed patient	67	
Levin tube feeding	1	
Gastrostomy tube feeding		11
Provision for Elimination		
Assist patient with use of commode	12	
Posture, Exercise and Rest		
Complete bed rest	324	153
Bed rest with bathroom privileges	295	13
Side boards	111	25
Get patient out of bed	208	605
Ambulate patient	145	201
Sit patient in chair	96	7
Turn patient every ____ hours	58	2
Elevate extremities	20	37
Assist patient with use of walker	39	18
Bed cradle	32	15

(continued on next page)

[a]Categories selected from Bertha Harmer and Virginia Henderson, Textbook of the Principles and Practices of Nursing, Macmillan Co., New York, 1939.

TABLE III (continued)

Nursing Procedures	Nursing Days Available	
	Medical Unit	Surgical Unit
Trapeze on bed	7	1
Assist patient to walk	5	
Dangle patient	1	38
Assist patient with crutch walking	10	5
Maintain patient in special position	16	85
Get patient up in wheelchair		33
Posey restraint belt	13	12
Exercise extremities	7	17
Controlling the Spread of Communicable Disease by Aseptic Measures		
Isolation technique	7	1
Stool precautions	8	
Needle and syringe precautions	18	
Bedpan precautions	9	
Dish precautions	14	
Tuberculosis precautions	12	4
Linen precautions	23	
Temperature, Pulse, Respirations, and Blood Pressure[a]		
Blood pressure	302	1707
Rectal temperatures	10	
Therapeutic Measures		
Baths and Packs		
Sitz bath	6	79
Hot packs		5
Local Applications of Heat, Cold, Pressure, and Chemicals for Circulatory Effects		
Ice bag	3	29
Throat gargle	6	6
Hot water bottle	79	104
Foot soak	13	3
Baker	17	46
Hot saline leg soaks	5	4
Eye irrigations	1	

(continued on next page)

[a]Routine temperature, pulse and respiration observations are not included.

Nursing Procedures	Nursing Dxs Available	
	Medical Dxs	Surgical Dxs
.....	7	1
.....	5	
.....	1	29
...	10	6
.	13	85
.....		27
.....	13	12
.....	7	17
.....	7	1
.....	6	
.....	18	
.....	9	
.....	14	
.....	12	4
.....	29	
.....	302	1707
.....	10	
.....	6	79
.....		5
.....	3	29
.....	6	6
.....	29	104
.....	18	3
.....	17	43
.....	3	6
.....	1	

(continued on next page)

TABLE III (continued)

Nursing Procedures	Nursing Days Available	
	Medical Unit	Surgical Unit
Eye compresses	1	
Flaxseed poultice		13
Iced compresses		5
Heat cradle		1
Moist heat to arm		4
Warm mouth irrigations		7
Heat to face		10
Methyl salicylate back rubs		13
Unsterile, hot saline compresses	30	15
Steam inhalator	6	8
Administration of Oxygen and Other Gases		
Administration of oxygen by catheter	9	15
Administration of oxygen by tent	17	3
Administration of oxygen by nebulizer	2	
Drainage and Irrigation of the Stomach		
Levin tube to Bell suction		39
Levin tube to Phelan suction		3
Miller-Abbott tube to Bell suction		6
Miller-Abbott tube to Phelan suction		3
Aspiration of stomach		1
Aspiration of gastrostomy tube		7
Advance and irrigate Miller-Abbott tube		18
Clamp Levin tube		3
Drainage, Irrigation, and Medication of Colon		
Saline enema	33	26
Soap suds enema	31	169
Oil retention enema	6	18
Tap water enema	1	1
Magnesium sulfate enema		1
Glycerin and water enema		2
Colostomy irrigation		13
Colostomy irrigation--assist with		7
Rectal tube		16
Rectal irrigation		2

(continued on next page)

TABLE III (continued)

Nursing Procedures	Nursing Type Available	
	Medical Unit	Surgical Unit
Bye compresses	1	
Flaxseed poultice		19
Iced compresses		3
Heat cradle		1
Moist heat to arm		4
Warm mouth irrigations		7
Heat to face		10
Methyl salicylate back rubs		19
Underfile, hot saline compresses	30	15
Steam inhalator	6	8
Administration of Oxygen and Other Gases		
Administration of oxygen by cathebter	9	15
Administration of oxygen by tent	17	3
Administration of oxygen by nebulizer	2	
Drainage and Irrigation of the Stomach		
Levin tube to Bell suction		39
Levin tube to Phelan suction		3
Miller-Abbott tube to Bell suction		6
Miller-Abbott tube to Phelan suction		3
Aspiration of stomach		1
Application of gastrostomy tube		7
Advance and irrigate Miller-Abbott tube		18
Clamp Levin tube		3
Drainage, Irrigation, and Medication of Colon		
Saline enema	33	25
Soap suds enema	31	139
Oil retention enema	6	16
Tap water enema	1	1
Magnesium sulfate enema		1
Glycerin and water enema		2
Colostomy irrigation		13
Colostomy irrigation--sealed with		7
Rectal tube		15
Rectal irrigation		2

(continued on next page)

TABLE III (continued)

Nursing Procedures	Nursing Days Available	
	Medical Unit	Surgical Unit
Drainage, Irrigation, and Medication of the Urinary Bladder		
Irrigation of catheter		91
Foley catheter to constant bladder drainage	10	139
Foley catheter to constant bladder drainage and Kelly flask		98
Clamp Foley catheter		3
Catheterization	7	51
Irrigation and Medication of the Vulva, Perineum and Vagina		
Perineal care	9	22
Vaginal douche	1	27
Drainage and Irrigation of Other Body Areas		
Postural drainage	24	11
Chest drainage		1
Chest drainage--water sealed		3
Tracheal suctioning		2
"T" tube to gravity drainage		5
Clamp "T" tube		2
Introduction to Medical and Surgical Nursing		
Surgical Dressings and Care of Wounds		
Irrigation of wound		39
Burrows solution--wet compresses	1	
Dry sterile dressings	6	53
Wet Zephiran dressings		1
Colostomy dressings		22
Sterile saline abdominal packs		11
Sterile saline dressings		25
Reinforce dressing		1
Bacetracin dressing		19
Bandages and Binders		
Elastic stockings	438	33
Ace bandages to legs		33
Scultetas binder	2	86
Breast binder		6

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TABLE III (concluded)

Nursing Procedures	Nursing Days Available	
	Medical Unit	Surgical Unit
Preoperative Nursing Care		
Abdominal prep	1	15
Perineal prep	1	12
Triple prep		8
Thigh and groin prep		2
Thigh prep		3
Neck prep		2
Chest prep		4
Leg prep		7
Breast prep		2
Spinal prep		8
Thyroid prep		2
Face prep		1
Toe prep		1
Back prep		2
Orthopedic prep		3
Foot prep		1
Zephiran foot soaks		5
Hypertonic saline soaks		10
Septisol foot soaks		1
Septisol abdominal scrubs		4
Phisohex abdominal scrubs		1
Other Procedures		
Diabetic foot care	12	
Remove dorsal splint		1
Sputum cup	19	
Change colostomy bag		20

Source: Data collected from both nursing and doctors' orders on a selected medical unit and a selected surgical unit at "X" hospital.

TABLE III (concluded)

Nursing Procedures	Nursing Days Available	
	Medical Unit	Surgical Unit
Preoperative Nursing Care		
Abdominal prep	1	18
Perineal prep	1	12
Triple prep		8
Thigh and groin prep		2
Thigh prep		3
Neck prep		2
Chest prep		4
Leg prep		7
Breast prep		2
Spinal prep		8
Thyroid prep		2
Face prep		1
Toe prep		1
Back prep		2
Orthopedic prep		3
Foot prep		1
Septican foot soaks		5
Hyperbonic saline soaks		10
Sepsisol foot soaks		1
Sepsisol abdominal scrubs		4
Phisohex abdominal scrubs		1
Other Procedures		
Diabetic foot care	12	
Remove dorsal splint		1
Suction cup	19	
Change colostomy bag		20

Source: Data collected from both nursing and doctors' orders on a selected medical unit and a selected surgical unit at "X" hospital.

TABLE IV

THE KINDS OF DIETS ORDERED FOR PATIENTS IN TERMS OF THE NUMBER OF PATIENT DAYS IN A SELECTED MEDICAL AND A SELECTED SURGICAL UNIT FEBRUARY 19, 1954 TO APRIL 16, 1954

Type of Diet	Number of Patient Days Followed	
	Medical Unit	Surgical Unit
House	376	1142
Soft	30	152
Liquid	5	71
Clear fluid	10	37
Water and gingerale only	3	
Cracked ice	7	4
Water only	3	31
Bland	29	
As tolerated	14	22
Whole milk	3	
Diabetic	13	61
Diabetic--2000 cal	5	
Diabetic--1800 cal	44	6
Diabetic--2300 cal	8	
Diabetic--1200 cal	24	16
Diabetic--1500 cal	8	
Diabetic--1170 cal	7	
1200 calorie	31	5
1000 calorie	21	
2000 calorie	10	
Low sodium #1	22	
Low sodium #1, high protein, soft	11	
Low sodium #1, 45 gm protein	14	
Low sodium "2	63	1
Low sodium #2, 2000 cal diabetic	1	
Low sodium #2, 1200 cal	11	
Low sodium #3	67	11
Low sodium #3--6 meal bland	20	
Low sodium #3--6 meal bland--soft	6	
Low sodium #3, bland, 1300 cal	17	
Low sodium #3, soft	30	
Low sodium #4	28	
Low sodium #4, soft	11	

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TABLE IV

DIETS ORDERED FOR PATIENTS IN TERMS OF THE NUMBER OF PATIENT DAYS IN A SPECIFIED MEDICAL AND A SPECIFIED SURGICAL UNIT FEBRUARY 19, 1954 TO APRIL 16, 1954

Type of Diet	Number of Patient Days Followed	
	Medical Unit	Surgical Unit
House	379	1142
Soft	30	152
Liquid	5	71
Clear fluid	10	37
Water and gingerale only	3	
Cracked ice	7	4
Water only	3	31
Bland	29	
As tolerated	14	22
Whole mil	3	
Diabetic	13	01
Diabetic--2000 cal	5	
Diabetic--1800 cal	44	6
Diabetic--2300 cal	8	
Diabetic--1200 cal	24	16
Diabetic--1500 cal	8	
Diabetic--1170 cal	7	
1200 calorie	31	5
1000 calorie	21	
2000 calorie	10	
Low sodium #1	22	
Low sodium #1, high protein, soft	11	
Low sodium #1, 45 gm protein	14	
Low sodium #2	03	1
Low sodium #2, 2000 cal diabetic	1	
Low sodium #2, 1200 cal	11	
Low sodium #3	67	11
Low sodium #3--6 meal bland	20	
Low sodium #3--6 meal bland--soft	6	
Low sodium #3, bland, 1300 cal	17	
Low sodium #3, soft	30	
Low sodium #4	28	
Low sodium #4, soft	11	

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TABLE IV (concluded)

Type of Diet	Number of Patient Days Followed	
	Medical Unit	Surgical Unit
Low sodium #4, low fat	45	
Low sodium, 1200 cal	6	
Low sodium, liquid	18	
Low sodium, high carbohydrate, low sodium	4	
Low salt #2	24	
Low salt, low fat		16
Salt free		7
Low salt #1		1
Low fat, soft	5	
Low protein	3	
High calorie, low protein	13	
High carbohydrate, high protein	29	15
High carbohydrate, high protein, 3000 cal	19	
Tube feedings	7	
Six meal bland, soft	10	
Low residue	29	100
Milk and cream	17	11
Very soft without added salt	20	
Six meal bland	36	44
Low fat, 1000 cal	11	
High carbohydrate, high protein, low fat	16	
Supplemental feedings	14	
Low fat, bland	5	
Five meal bland		2
Gastrostomy feedings		11
Fat free		6
Low carbohydrate, low fat		11
Low fat		10
High protein		15
High carbohydrate		8
Low residue house without fat		7
High protein, low residue		7
Ulcer		9
1800 calorie		17
High vitamin, high protein		5

Source: Data collected on a selected medical and a selected surgical unit at "X" hospital.

TABLE V

THE MEDICATIONS ORDERED IN TERMS OF THE NUMBER OF PATIENT DAYS THEY WERE ADMINISTERED ON A SELECTED MEDICAL AND A SELECTED SURGICAL UNIT CLASSIFIED ACCORDING TO A SELECTED CATEGORY[a] FEBRUARY 19, 1954 TO APRIL 16, 1954

Category	Medication	Number of Patient Days Administered	
		Medical Unit	Surgical Unit
Drugs Producing Depression of C.N.S.[b] Narcotics			
	Codeine.....	62	254
	Demerol.....	55	235
	Dilaudid.....		6
	Hycoden.....	5	
	Morphine.....	38	74
	Pantapon.....		24
	Paragoric.....	3	12
	Tincture of opium--deodorized.....		5
Sedatives, Hypnotics and Soporific Drugs			
	Chloral hydrate....	390	374
	Dilantin sodium....	43	5
	Meboral.....	14	
	Nembutal.....	414	471
	Paraldehyde.....	2	1
	Phenobarbital.....	147	106
	Seconal.....	82	264
	Sodium amytal.....	24	19
	Sodium luminal.....	3	26
Drugs Acting on Special Brain Centers--Analgesics and Antipyretics			
	Aspirin.....	31	301
	Emagrin.....	195	95
	Emperin.....	6	29
	Pabolate.....		12

[a]Categories selected from Harold N. Wright and Mildred Montag, A Textbook of Pharmacology and Therapeutics, 4th edition, W. B. Saunders Company, Philadelphia, 1948.

[b]Central Nervous System.

(continued on next page)

TABLE V

THE MEDICATIONS ORDERED IN TERMS OF THE NUMBER OF PATIENT DAYS THEY WERE ADMINISTERED ON A SELECTED MEDICAL AND A SELECTED SURGICAL UNIT CLASSIFIED ACCORDING TO A SELECTED CATEGORY[a] FEBRUARY 1, 1954 TO APRIL 15, 1954

Category	Medication	Number of Patient Days Administered	
		Medical Unit	Surgical Unit
Drugs Producing Depression of C.N.S.[b] Narcotics			
	Codeine	62	254
	Demerol	55	235
	Dilaudid		6
	Hycodan	5	
	Morphine	38	74
	Pentapon		24
	Paregoric	3	12
	Tincture of opium--deodorized		5
Sedatives, Hypnotics and Soporific Drugs			
	Chloral hydrate	390	374
	Dilantin sodium	49	5
	Nembutal	124	471
	Phenobarbital	147	106
	Seconal	82	264
	Sodium amytal	24	19
	Sodium luminal	3	26
Drugs Acting on Special Brain Centers--Analgesics and Antipyretics			
	Aspirin	71	301
	Empirin	195	95
	Empirin	6	29
	Pabalate		12

[a]Categories selected from Harold N. Wright and Mildred Fonda, A Textbook of Pharmacology and Therapeutics, 4th edition, W. B. Saunders Company, Philadelphia, 1954.

[b]Central Nervous System.

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TABLE V (continued)

Category	Medication	Number of Patient Days Administered	
		Medical Unit	Surgical Unit
Respiratory Stimulants			
	Aminodrox.....	2	
	Aminophyllin suppository.....	82	12
	Amsec capsule.....	23	
	Atropine.....	3	9
	Edrial.....	8	
	Ephedrine and aminophyllin capsule....	10	
	Ephedrine sulfate..		23
	Isoprel.....	6	6
Expectorants and Emetics			
	Ammonium chloride..	25	
	Elixir of terpin hydrate.....	52	8
	Elixir of terpin hydrate with codeine	39	13
	Syrup of hydriotic acid.....	31	1
Drugs Acting on the Peripheral Nervous System--Local Anaesthetics			
	Nupercainal ointment	8	5
Drugs Producing Depression of the Parasympathetic Nerve Endings			
	Benadryl.....	10	1
	Pyrabenzamine.....	54	41
	Scopolamine.....	3	64
	Tincture of belladonna.....	60	57
Drugs Stimulating Sympathetic Nerve Endings			
	Chlorotrimeton.....	9	
	Dexadrine.....	12	
	Dexamyl.....	22	
	Neosynophrine nose drops.....	39	3

(continued on next page)

TABLE V (continued)

Category	Medication	Number of Patient Days Administered	
		Medical Unit	Surgical Unit
Acid, Base, Water and Mineral Balance			
	Mercuhydrin.....	60	3
	Neohydrin.....	11	
	Potassium chloride.	73	9
	Sodium chloride....	5	
Drugs Acting on the Circulatory System--Cardiac Stimulants			
	Cedilandid.....	1	
	Crystodigin.....	11	32
	Digitalis.....	355	130
	Digotoxin.....	11	6
	Puradigin.....	4	
Cardiac Depressants			
	Quinidine sulfate..	34	
Vasodilators			
	Apriscoline.....	16	
	Nitroglycerin.....	56	
	Priscoline.....	12	
	Rauviloid.....	34	
	Vevaloid.....	8	
Anticoagulants			
	Dicumerol.....	2	
	Repavin.....	14	6
Coagulants			
	Vitamin K.....		5
	Synkovit.....	16	
Hematinics			
	Feosol.....	44	14
	Ferrous gluconate..	5	
	Therigran.....	26	
Biological Preparations--Preparations of Endocrine Origin			
	A C T H.....	9	
	Choline.....	1	
	Cortisone.....	53	4

(continued on next page)

TABLE V (continued)

Category	Medication	Number of Patient Days Administered	
		Medical Unit	Surgical Unit
Acid, Base, Water and Mineral Balance			
	Mercurhydrin	50	3
	Neohydrin	11	
	Potassium chloride	73	9
	Sodium chloride	5	
Drugs Acting on the Circulatory System-- Cardiac Stimulants			
	Digitalis	355	130
	Digoxin	11	6
Cardiac Depressants			
	Quinidine sulfate	34	
Vasodilators			
	Aminophylline	16	
	Nitroglycerin	56	
	Peripentolate	12	
	Rauwiloid	34	
	Veratoid	3	
Anticoagulants			
	Dicumarol	2	
	Heparin	14	6
Diuretics			
	Vitamin K		5
	Syrocyt	16	
Hemostatics			
	Pitocol	44	14
	Ferrous gluconate	5	
	Thrombran	26	
Biological Preparations-- Preparations of Endocrine Origin			
	A D T H	6	
	Ophtin	1	
	Cortisone	53	4

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TABLE V (continued)

Category	Medication	Number of Patient Days Administered	
		Medical Unit	Surgical Unit
	Crude liver extract	12	
	D O C A.....	1	
	Histamine.....	2	
	Methyl testosterone	7	
	N.P.H. insulin....	80	77
	P Z I insulin.....	20	
	Regular insulin...	48	32
	Stilbesterol.....	8	
	Testosterone.....	23	
Vitamins and Digestive Enzymes			
	Berocca C.....	9	1
	Multivitamins.....	252	274
	Niacin.....	6	
	Thiamine chloride.	23	15
	Vitamin A.....	12	52
	Vitamin D complex syrup.....		15
	Vitamin B-12.....	37	
	Vitamin C.....	7	146
Drugs Acting Locally on Smooth Muscle or Mucous Membrane--Cathartics			
	Alophen.....	76	
	Cascara.....	54	
	Magnesium sulfate.		1
	Metamucil.....	4	
	Milk of magnesia..	501	474
	Mineral oil.....	309	489
Antacids			
	Amphojel.....	211	35
	G.I. powders.....	31	
Smooth Muscle Relaxers			
	Banthine.....	76	18
	Donnatal.....	35	
	Probanthine.....	36	

(continued on next page)

TABLE V (continued)

Category	Medication	Number of Patient Days Administered	
		Medical Unit	Surgical Unit
	Crude liver extract	12	
	D O C A	1	
	Heptamine	2	
	Methyl testosterone	7	
	N.P.H. Insulin	80	77
	P Z I insulin	20	
	Regular insulin	48	32
	Stilbesterol	8	
	Testosterone	23	
Vitamins and Digestive Enzymes			
	Berocca C	9	1
	Multivitamins	252	274
	Niacin	6	
	Thiamine chloride	23	15
	Vitamin A	12	52
	Vitamin D complex syrup		15
	Vitamin B-12	37	
	Vitamin C	7	126
Drugs Acting Locally on Smooth Muscle or Mucous Membrane--Belladonnas			
	Adophen	76	
	Cascara	54	
	Magnesium sulfate		1
	Metamucil	4	
	M.O.M. of magnesia	302	474
	Mineral oil	209	489
Antacids			
	Amphojel	211	
	C.C. powders	21	35
Smooth Muscle Relaxers			
	Bentylne	76	19
	Dimenhal	35	
	Probanthine	36	

(continued on next page)

TABLE V (continued)

Category	Medication	Number of Patient Days Administered	
		Medical Unit	Surgical Unit
Antiemetics			
	Thorazine.....	21	
Counterirritants			
	Chloroform liniment	7	
	Chloroform ointment	5	
	Oil of wintergreen.	13	10
Emollient, Demulcent and Protective Drugs			
	Calamine lotion....	1	5
	Calydryl lotion....	3	8
	Lanolin.....	24	8
	Lime water.....	5	
	Olive oil.....	5	
Chemotherapeutic Drugs--Sulfonamide Compounds			
	Elkosin.....	20	36
	Gantrisin.....	20	184
	Sulfadiazine.....	10	
	Sulfasaxadine.....		9
	Sulfathaladine.....	5	14
Antibiotic Substances			
	Achromycin.....	61	58
	Aureomycin.....		14
	Bacetracin.....	2	
	Bacetracin ointment		22
	Chloromycetin.....		15
	Combiotic.....	66	19
	Ergthromycin.....	10	16
	Neomycin.....		14
	Penicillin--aerosol		7
	Penicillin--aqueous	51	55
	Penicillin--oral...	11	
	Penicillin--procaine	79	163
	Streptomycin.....	17	280
	Streptomycin--aerosol		6
	Terramycin.....	8	4

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TABLE V (concluded)

Category	Medication	Number of Patient Days Administered	
		Medical Unit	Surgical Unit
Ophthalmic Preparations			
	Atropine eye drops		22
	Aureomycin eye drops		6
	Boric acid eye drops	7	
	Chloromycetin eye drops.....		16
	Ophthalmic ointment	1	
	Ophthalmic solution		3
	Sulfacetamide eye drops.....	4	
	Sylamide eye drops.	4	
Other Medications			
	Benzyl benzoate....	13	
	Brandy.....	5	8
	Formula 2050A.....	8	
	Lassar's paste.....	8	
	Methiscol.....	16	22
	Paradione capsule..	22	
	Peritrate.....	7	

Source: Data collected on a selected medical unit and a selected surgical unit at "X" hospital.

TABLE VI

THE LABORATORY TESTS, X-RAYS, AND SPECIAL TREATMENTS ORDERED FOR PATIENTS ON A SELECTED MEDICAL AND A SELECTED SURGICAL UNIT

Diagnostic Procedures	Number of Times Ordered	
	Medical Unit	Surgical Unit
Laboratory Tests		
Glucose tolerance test	4	1
Sedementation rate		1
Cervical biopsy	1	
Liver biopsy	1	
Prothrombin time	8	1
Urine specimen (other than routine)	15	10
Urine culture	3	4
Stool specimen	63	6
Bromosulphathalein liver function test		1
24 hour sputum collection	15	9
Sickle cell test	1	
Gastric secretory test		1
Gastric analysis for acid fast bacilla	7	3
Clotting time		15
Lumbar puncture	3	
Biopsy		1
Frog test for pregnancy	1	1
Fasting blood sugar	1	7
Diabetic urine specimen	105	52
24 hour urine specimen	17	6
Eye culture		1
Sputum specimen	3	
Culture of 24 hour urine specimen	1	
Blood culture	8	
X-Ray Tests or Plates		
Barium enema	13	17
Barium swallow	2	1
Complete G.I. series	19	7
K.U.B. plate		2
Intravenous pyelogram	9	15
Retrograde pyelogram		2
Chest plate (other than admission plate)	17	9
Abdomen	1	5

(concluded on next page)

TABLE VI

THE LABORATORY TESTS, X-RAYS, AND SPECIAL TREATMENTS ORDERED FOR PATIENTS ON A SELECTED MEDICAL AND A SELECTED SURGICAL UNIT

Diagnostic Procedures	Number of Times Ordered	
	Medical Unit	Surgical Unit
Laboratory Tests		
Glucose tolerance test	4	1
Sedimentation rate		1
Cervical biopsy	1	
Liver biopsy	1	
Prothrombin time	8	1
Urine specimen (other than routine)	1.5	10
Urine culture	3	4
Stool specimen	63	6
Bromsulphthalein liver function test		1
24 hour sputum collection	1.5	9
Blood cell test	1	
Gastric secretory test		1
Gastric analysis for acid fast bacilli	7	3
Clotting time		15
Lumbar puncture	3	
Biopsy		1
Frog test for pregnancy	1	1
Fasting blood sugar	1	7
Bacteria urine specimen	105	52
24 hour urine specimen	17	6
Eye culture		1
Sputum specimen	3	
Culture of 24 hour urine specimen	1	
Blood culture	8	
X-ray Tests or Plates		
Barium enema	13	17
Barium swallow	2	1
Complete G.I. series	19	7
K.U.B. plate		2
Intravenous pyelogram	9	15
Retrograde pyelogram		2
Chest plate (other than admission plate)	17	9
Abdomen	1	5

(continued on next page)

TABLE VI (concluded)

Diagnostic Procedures	Number of Times Ordered	
	Medical Unit	Surgical Unit
Extremities	2	5
Fluoroscopy of heart	1	
Graham test	4	3
Choleangiogram		2
Other Diagnostic Procedures		
Skin temperatures		3
Cystoscopy	2	6
Basal metabolism rate	1	3
Pulmonary function tests		1
Proctoscopy	4	1
Electrocardiogram	27	12
Cardiac catheterization	1	
Pelvic examination	1	1
Indigo carmine injection		3
Bronchoscopy		7
Laryngoscopy		1
Venous pressure	2	
Sedation test	2	1
Treatments		
Intravenous therapy	44	165
Veneclysis		8
Transfusions	11	19
Gastric lavage		1
Buck's extension		12 (patient days)
Balkan frame		37 (patient days)
Fracture boards		39 (patient days)
Lumbar sympathetic block	3	
Intravenous procaine	1	
Stellate block		1
Nitrogen mustard therapy		10
Evaluation Studies		
Post-operative hypertensive studies		1

Source: Computed from data collected on selected units at "X" hospital.

TABLE VI (concluded)

Diagnostic Procedures	Number of Times Ordered	
	Medical Unit	Surgical Unit
Sphygmomanometer	2	5
Fluoroscopy of heart	1	
Sputum test	4	3
Cholangiogram		2
Other Diagnostic Procedures		
Skin temperatures		3
Cystoscopy	2	6
Basal metabolism rate	1	3
Pulmonary function tests		1
Proctoscopy	4	1
Electrocardiogram	27	12
Cardiac catheterization	1	
Pelvic examination	1	1
Indigo carmine injection		3
Bronchoscopy		7
Laryngoscopy		1
Venous pressure	2	
Sedation test	2	1
Treatments		
Intravenous therapy	44	165
Venesection		8
Transfusions	11	19
Gastric lavage		1
Rectal extension		12 (patient days)
Balkan frame		37 (patient days)
Fracture boards		39 (patient days)
Lumbar sympathetic block	3	
Intravenous procaine	1	
Stellate block		1
Nitrogen mustard therapy		10
Evaluation Studies		
Post-operative hypertensive studies		1

Source: Compiled from data collected on selected units at "X" hospital.

TABLE VII

SPECIFIC OBSERVATIONS REQUIRED OF THE NURSE FROM DOCTORS' ORDERS ON A SELECTED MEDICAL UNIT AND A SELECTED SURGICAL UNIT[a]

Observation	Nursing Days Available	
	Medical Unit	Surgical Unit
Intake and Output	238	553
Force Fluids	62	60
Weigh Patient	143	51
Diabetic Chart	47	46
Record Number of Stools	10	
No Enemas unless Ordered		12
No Back Rubs		2
No Rectal Examinations		8
Tracheal Suction prn		9
Stra in Urine for Stones		4
Nurse Patient on Right Side Only		2
Head of Bed not Elevated More Than 30 Degrees		7
Encourage Deep Breathing	27	6
Mouth Gag at Bedside	69	
No Weight Bearing When Walking with Crutches		7
Observe for Urinary Retention	10	
Check Radial Pulse		2
Observe Colostomy Function		1
Observe for Allergic Reaction	1	1
Observe Nature of Vomiting	3	11
Observe Respiratory Difficulties	26	2
Observe for Symptoms of Diabetic Coma		2
Observe Amount and Color of Urine		1
Observe for Post-operative Shock		1
Observe for Bleeding	15	53
Observe for Fever Above a Certain Degree	11	
Observe for Seizures	12	
Observe Nature of Stools		11
Check Fetal Heart Sounds	7	
Check Sleeping Pulse	11	
Observe for Transfusion Reactions	2	1
Check Dorsalis Pedis Pulse		10
Observe for Lack of Feeling in Hands and Feet		1
Observe Nerve Palsy		1

[a]Source: Computed from data collected on a selected medical unit and a selected surgical unit at "X" Hospital.

TABLE VII

SPECIFIC OBSERVATIONS REQUIRED OF THE NURSE FROM DOCTORS' ORDERS ON A SELECTED MEDICAL UNIT AND A SELECTED SURGICAL UNIT[a]

Observation	Nursing Days Available	
	Medical Unit	Surgical Unit
Intake and Output	298	353
Force Fluids	62	60
Weigh Patient	143	31
Diabetic Chart	47	45
Record Number of Stools	10	
No Enema unless Ordered		12
No Bed Pan		2
No Rectal Examinations		8
Tracheal Suction prn		2
Strn in Urine for Stones		4
Nurse Patient on Right Side Only		2
Head of Bed not Elevated More Than 30 Degrees		7
Encourage Deep Breathing	27	6
Mouth Care as Needed	69	
No Weight Bearing When Walking with Crutches		7
Observe for Urinary Retention	10	
Observe Radial Pulse		2
Observe Colostomy Function		1
Observe for Allergic Reaction	1	1
Observe Nature of Vomiting	3	11
Observe Respiratory Difficulties	26	2
Observe for Symptoms of Diabetic Coma		2
Observe Amount and Color of Urine		1
Observe for Post-operative Shock		1
Observe for Bleeding	15	39
Observe for Fever Above a Certain Degree	11	
Observe for Seizures	12	
Observe Nature of Stools		11
Check Fetal Heart Sounds	7	
Check Bleeding Pulse	11	
Observe for Termination Reactions	2	1
Check Dorsalis Pedis Pulse		10
Observe for Lack of Feeling in Hands and Feet		1
Observe Nerve Palsy		1

[a]Source: Computed from data collected on a selected medical unit and a selected surgical unit at XYZ Hospital.

TABLE VIII

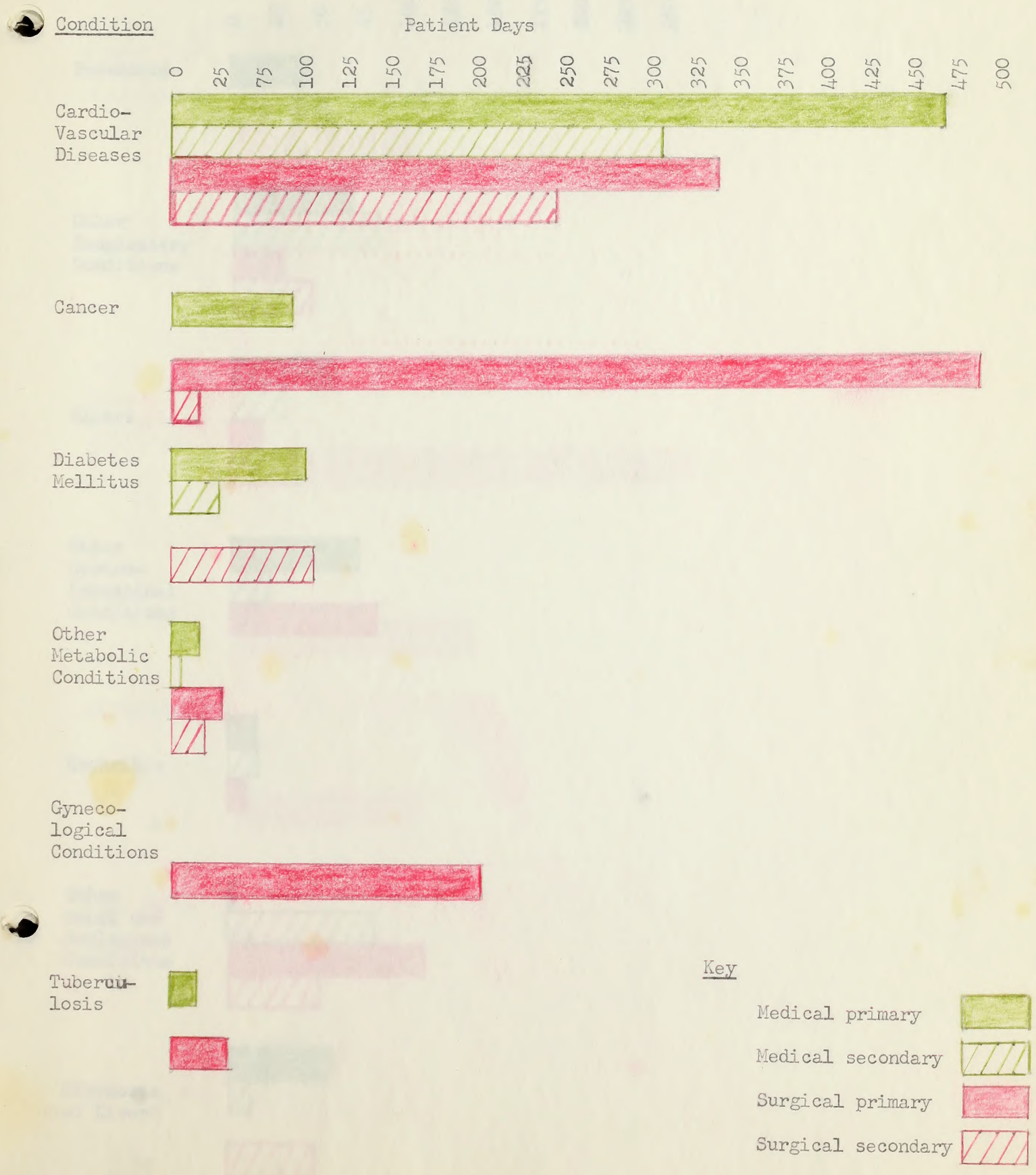
INCIDENCES OF PATIENT TEACHING RECORDED ON NURSES' NOTES OR DOCTOR'S ORDER SHEET ON A SELECTED MEDICAL UNIT AND A SELECTED SURGICAL UNIT

Patient Teaching	Number of Incidences of Teaching	
	Medical Unit	Surgical Unit
Teaching About Care After Discharge		
Dietician to teach patient about low sodium diet.....	1	
Teach patient how to test urine with clinitest and to administer own insulin.....	1	
Teach patient care of biliary drainage tube after discharge.....		1
Teach patient to do gastrostomy feedings....		1
Teach patient care of colostomy.....		4
Teach patient colostomy diet.....		4
Teach patient care of Foley catheter at home		1
Teach patient to fill hot water bottle.....		1
Teach patient arm exercises.....		1
Teach patient diabetic foot care.....		1
Teach patient to walk with crutches.....		2
Teach patient ulcer diet.....		1
Teaching to Prevent Trauma During Immediate Postoperative Phase		
Instruct patient not to move head.....		1
Instruct patient how to move in bed.....		1

Source: Completed from data collected from doctors' order sheets and nurses' notes on a selected medical unit and a selected surgical unit at "X" hospital.

GRAPH I

PRIMARY AND SECONDARY HEALTH PROBLEMS--
MEDICAL AND SURGICAL PATIENTS
ON BASIS OF NUMBER OF DAYS



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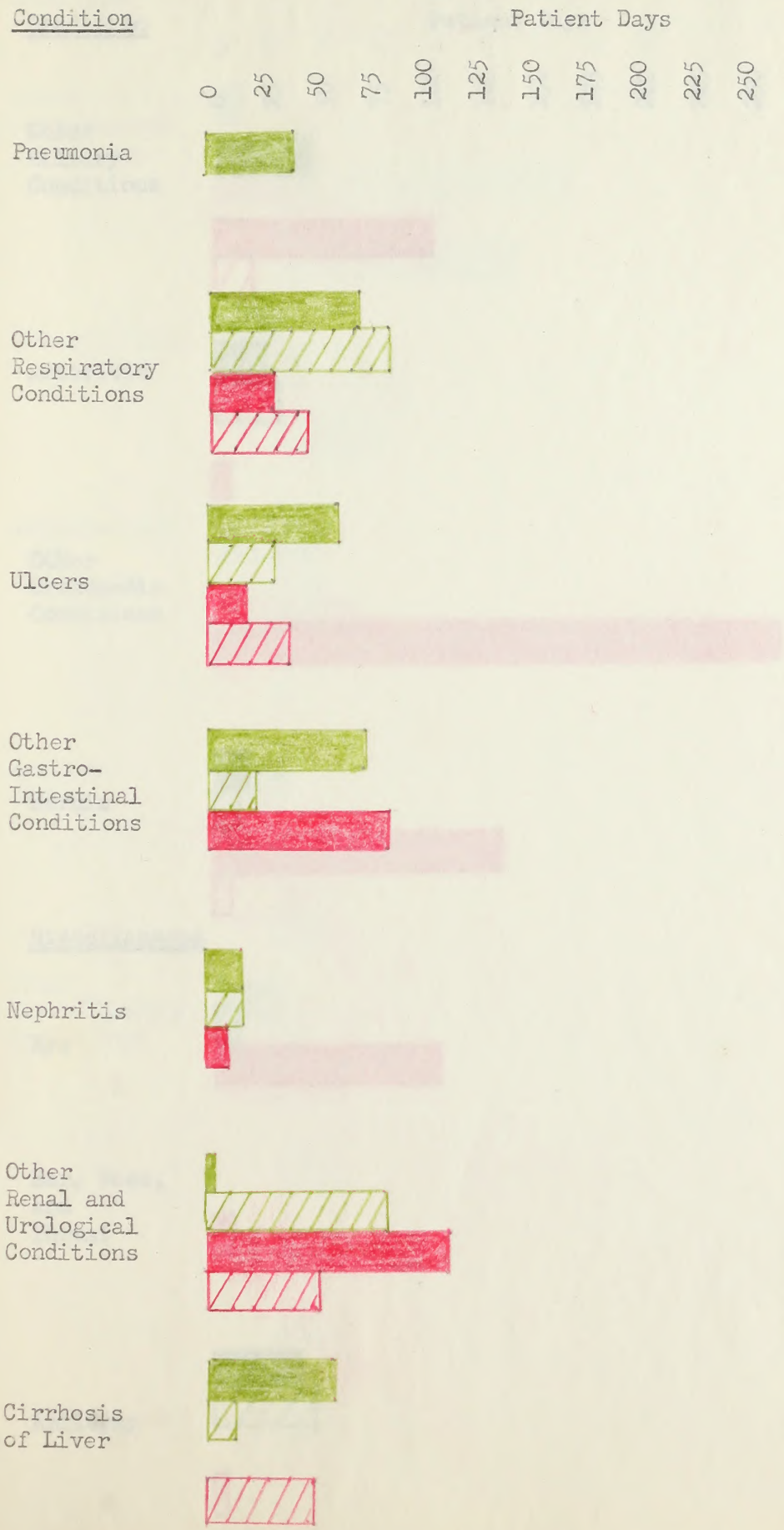

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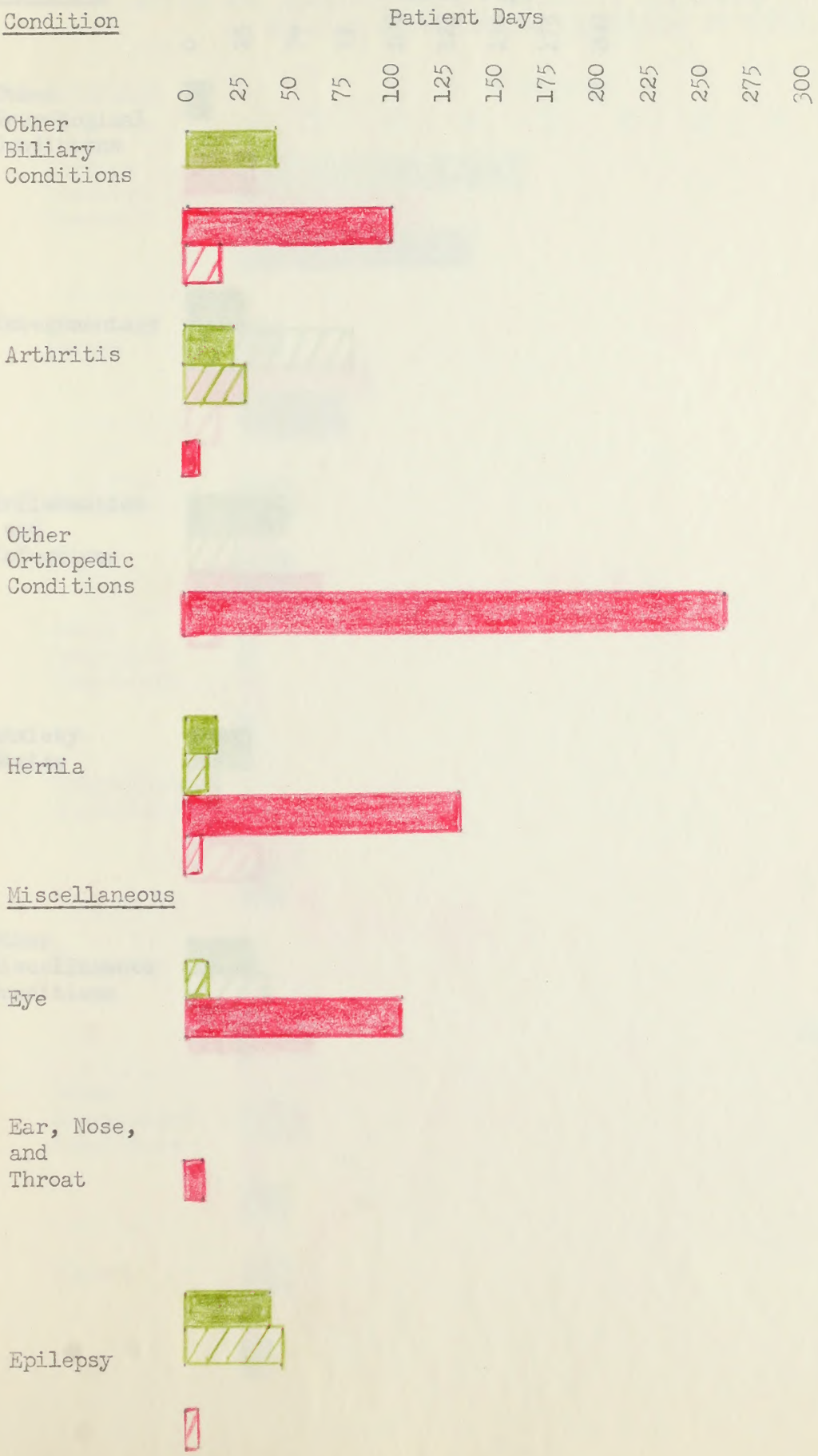

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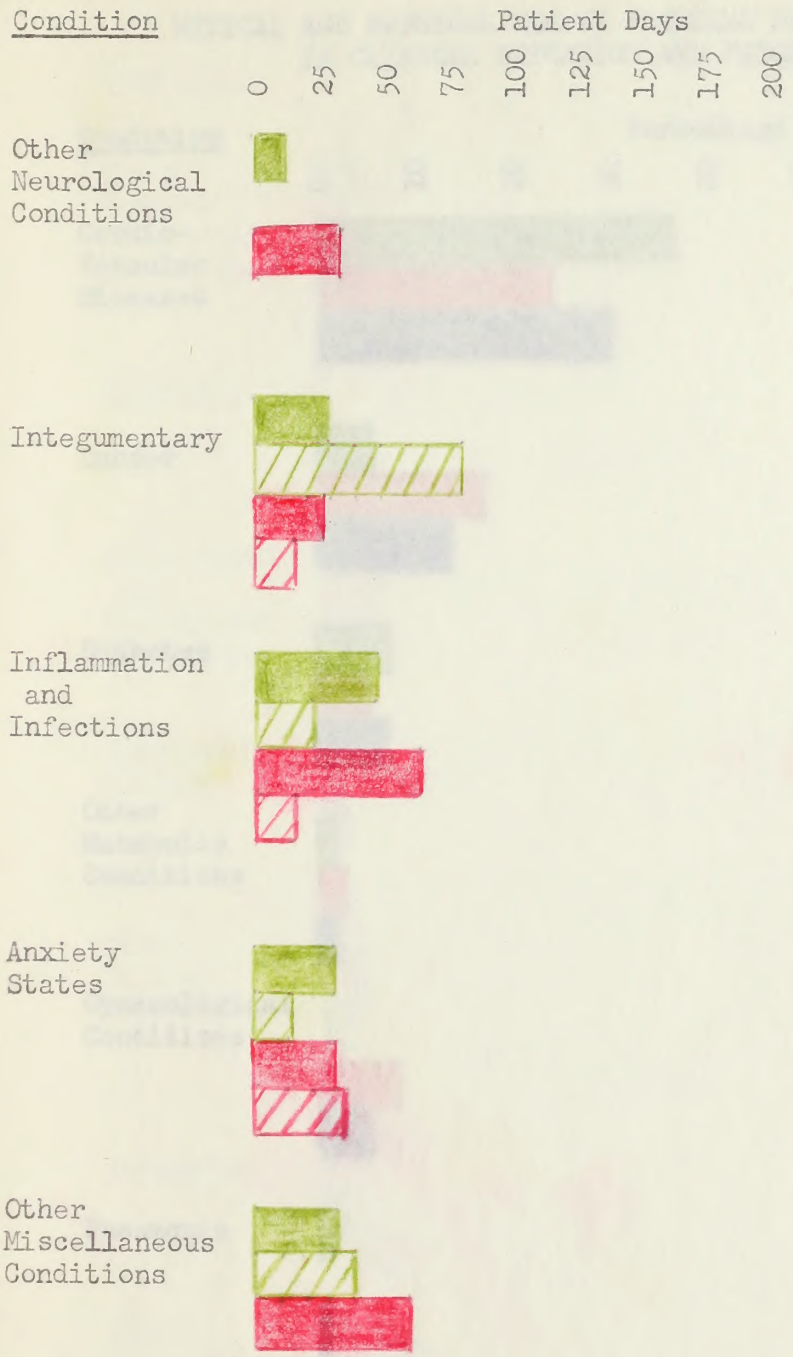
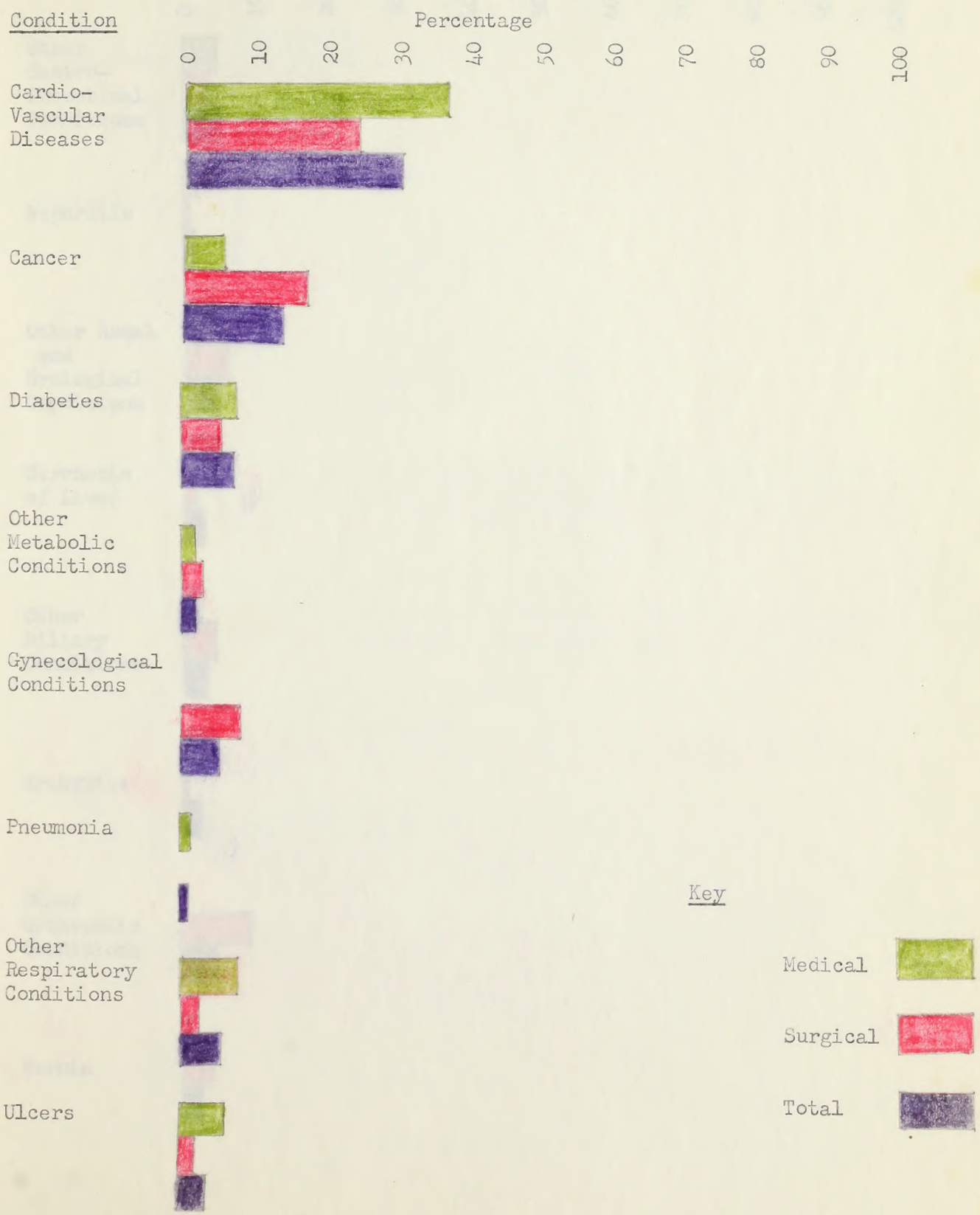


GRAPH II

MEDICAL AND SURGICAL HEALTH PROBLEMS BY PERCENTAGE OF DAYS AVAILABLE IN CLINICAL SITUATION AND PERCENTAGE OF TOTAL DAYS



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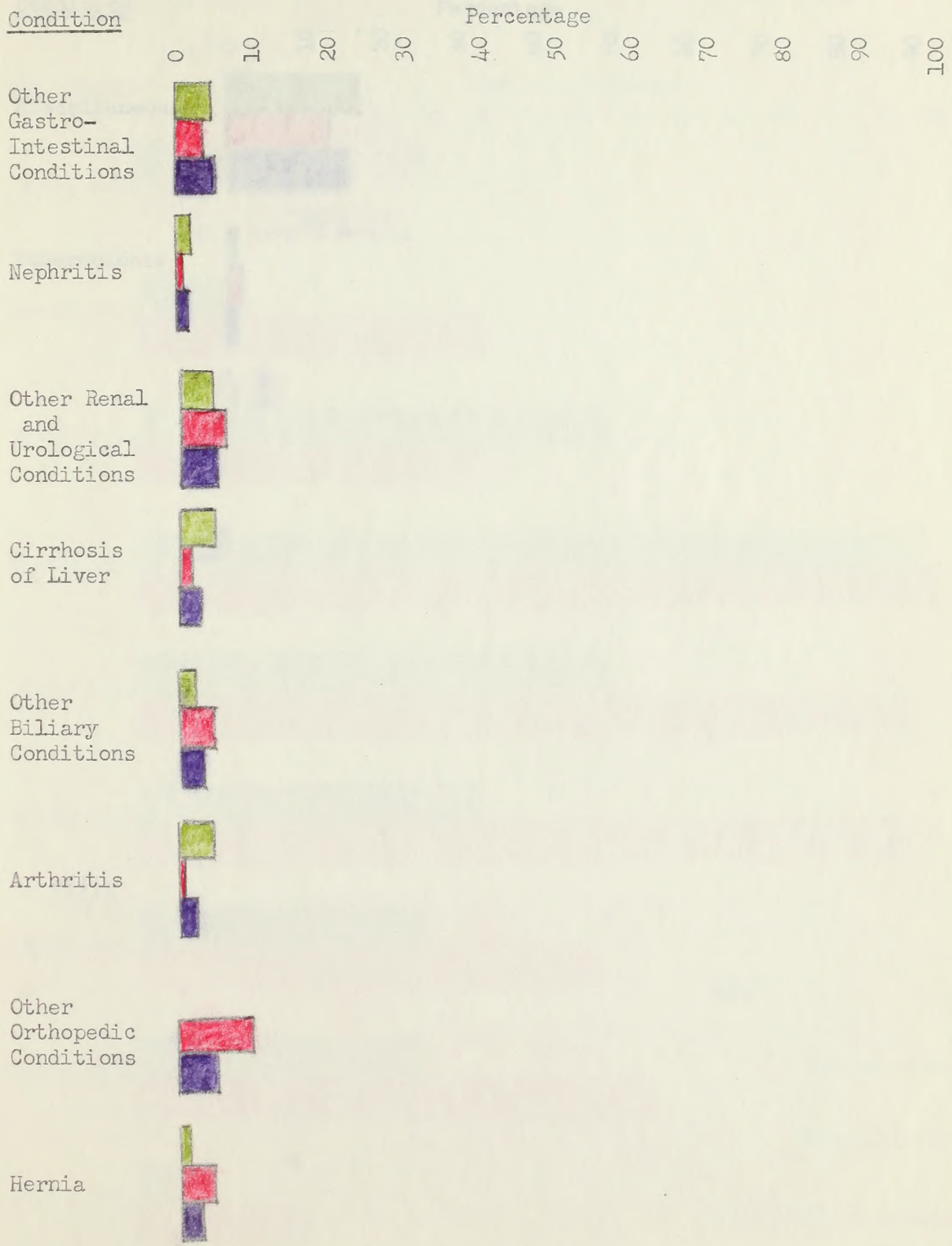

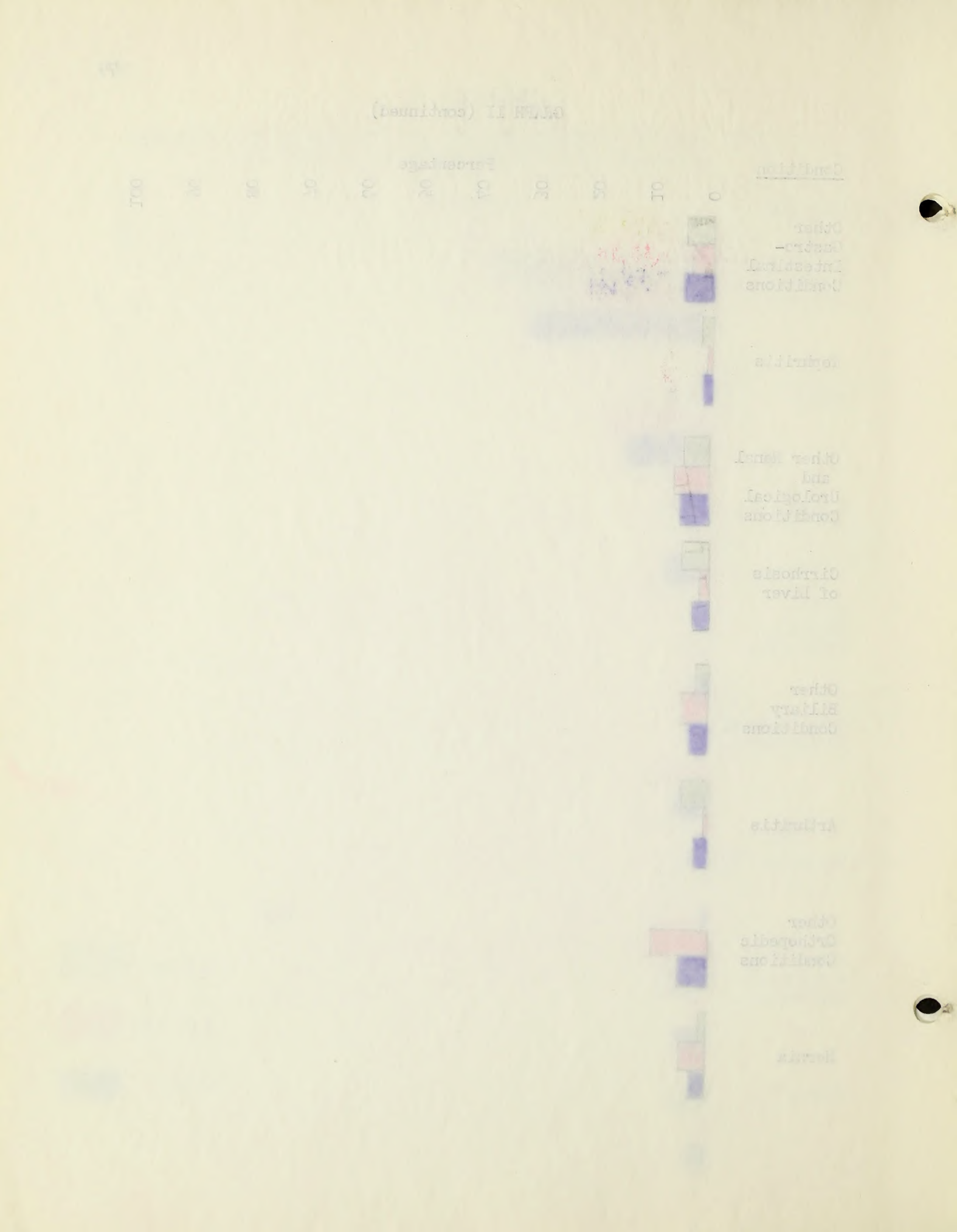

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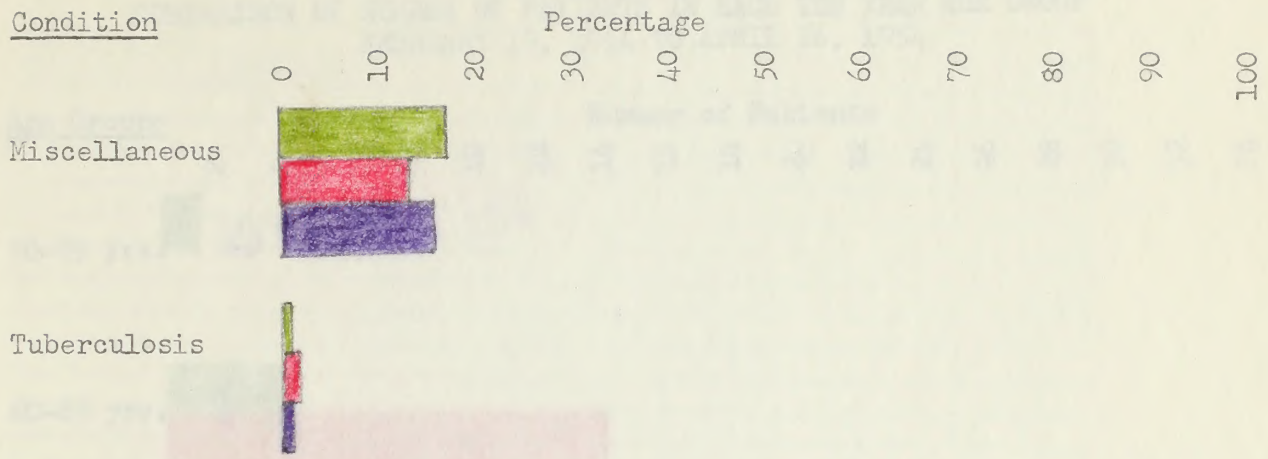


GRAPH III

COMPARISON OF NUMBER OF PATIENTS IN EACH TEN YEAR AGE GROUP
FEBRUARY 19, 1954 TO APRIL 16, 1954

Source: Data collected on a selected medical unit and a selected surgical unit at "X" hospital.

Name # Service Age

ADm. date Disch. date CUMULATIVE days total

Principle problem

Concomitant problems

Date of operation

MONTH & Day

Nursing Procedures(po)

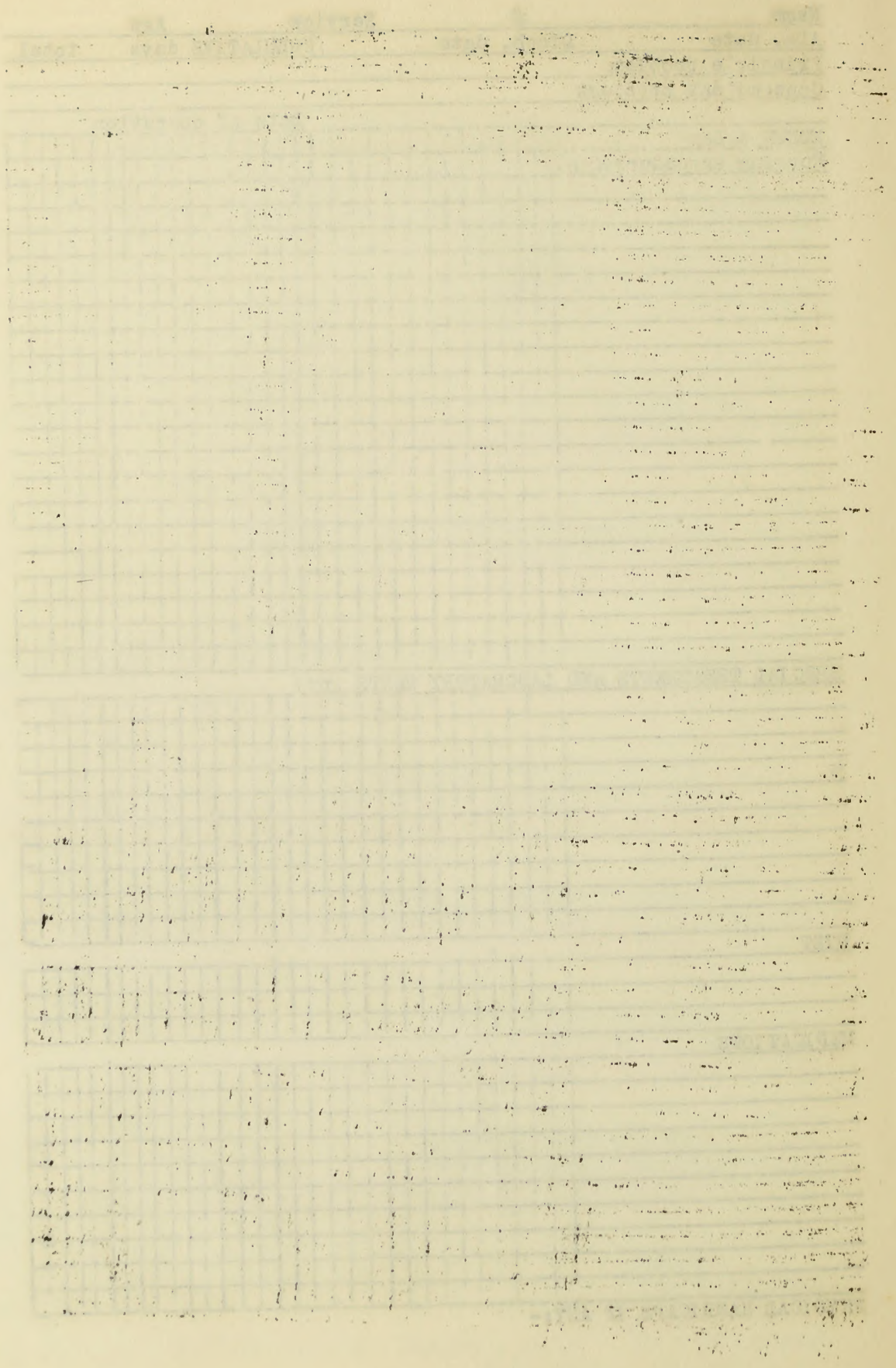
SPECIAL TREATMENTS AND LABORATORY TESTS (po)

%

DIET

MEDICATIONS

PHYSICAL HANDICAPS IF ANY:-



Patient's name _____

Occurence of complications or the req uiring of special skills or treatments that are atypical in the normal course of the principle problem

I. Treatments (medications and procedures) due to a concomitant p roblem

Surgical	Medical

II. Treatments due to a complication occurring as a result of or during p resent illness.

Surgical	Medical

III. Emergency symptoms requiring unanticipated care(ex. hemorrhage)

IV. Specific observations req uired by the nurse (ex. insulin reaction)

V. Health teaching - indicated extent and nature

Repetto, Catharine
Plan of teaching for integrated learning in a selected medical & surgical situation.

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